The Impact of the Development of the Gateway Pacific Terminal on the Whatcom County Economy

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for

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I. Executive Summary

In November 2011, Communitywise Bellingham retained Public Financial Management, Inc. (PFM) to conduct an independent review of the potential economic impacts associated with the development of the Gateway Pacific Terminal (GPT) at Cherry Point.

A prior study by Martin Associates, conducted on behalf of the developers of GPT, projected the economic benefits that would result from the development and operation of the terminal. That study and a subsequent third party review of its results did not address either potential costs that could result from the development and operation of GPT or the degree to which the development of GPT could reduce potential benefits from other sources of economic development or job growth in Whatcom County.

Our analysis suggests that the potential for cost is real. To the extent that the development and operation of GPT would lead to an increase in rail traffic in Bellingham and other parts of Whatcom County, there would be costs to mitigate the impact – particularly given the number of active rail crossings in the City.

The impact on other job growth and economic development strategies may be even more significant. To the extent that GPT's construction and operation could put other projected or planned growth at risk, it is possible that even if all of the projected employment benefits of GPT were achieved it could still have a net negative employment impact on Whatcom County's economy. If the development and operation of GPT led to the loss of more than 17 percent of projected job growth in Whatcom County between 2012 and 2021, or more than 13 percent in the ten year period after construction begins, the result would be a net loss in employment in the County.

Moreover, the planned development and operation of GPT could pose a specific risk to redevelopment plans for the Bellingham waterfront. State and local agencies have committed more than $40 million to the redevelopment of the former Georgia Pacific site in downtown Bellingham. The Port of Bellingham projects that over 25-30 years, redevelopment of the site could produce $1 billion in investment – including a net increase of 5,600 direct jobs alone. To the extent that development and operation of GPT increases rail traffic, it could reduce the feasibility of redevelopment and projected resulting jobs.

The risk of offsetting reductions in projected job growth is largely due to train traffic. First, the operation of GPT would lead to a significant increase in rail traffic through Whatcom County – especially through downtown Bellingham. Phase I operation would add five trains traveling to GPT through Bellingham on a daily basis. Each train would be between 7,000 and 8,500 feet – 1.3 to 1.6 miles – in length. Additional traffic is likely due to the return of rail cars from GPT.

Impacts to Bellingham – positive and negative – are significant for Whatcom County due to its role as the economic center of the County. Approximately 60 percent of all employment in the County is in Bellingham; Bellingham businesses generate more than three-quarters of all retail sales and more than half of all revenue related to accommodation and food services; in 2010, more than half of all residential home sales occurred in Bellingham; and, despite accounting for just 1.3 percent of total land in the County, 36 percent of total assessed county property value was in Bellingham.

Additional potential risks to growth beyond baseline projections are related to tourism and the in-migration of skilled workers and entrepreneurs to the region's economy. Again, these risks are related to both the projected increase in rail traffic and stigma associated with the transport of large amounts of coal through Whatcom County.

If the development of GPT proceeds, steps can be taken to reduce the impact of additional rail traffic through re-routing of rail traffic or new overpasses or changes to the street grid. Those steps could reduce potential risk and thereby increase the likelihood of net economic benefits for Whatcom County and Bellingham. Such steps, however, come at a cost that – to date – no party has assumed. To the extent that those costs are assumed by the public, it would reduce the net fiscal benefit of the GPT development to the public – especially if local governments were asked to bear those costs.

In assessing the findings of this report, different decision makers may not view the risks imposed by the development and operation of GPT in the same way and reach dissimilar, yet valid conclusions. The purpose of the study is not to recommend a specific course of action. Instead, the purpose is to provide policymakers – and the public – with additional information about the potential economic impact to reach a better-informed decision. With that aim, other communities along the rail line may find the economic analyses and risk-based approach in this report to be a template for undertaking their own review of the economic impact of GPT.

II. Introduction and Project Overview

In November 2011, Communitywise Bellingham retained Public Financial Management, Inc. (PFM) to conduct an independent review of the potential economic impacts associated with the development of the Gateway Pacific Terminal (GPT) at Cherry Point. In particular, Communitywise Bellingham asked PFM to assess some impacts not considered in the report by Martin Associates (Martin) which projected employment and other economic benefits associated with the development and operation of GPT.

PFM is a national consulting and financial advisory firm, headquartered in Philadelphia, Pennsylvania, that serves public-sector clients. With 30 offices and over 450 professionals located across the country, PFM is the nation's leading provider of independent government financial advisory services. Throughout the remainder of this report, the professionals representing PFM in this engagement will be referred to as the project team or PFM.

To facilitate its work on this report, the project team spent four days in Washington conducting meetings in Bellingham, Olympia, and Bellevue. During this time, the project team met with over 50 people representing a diverse set of interests, viewpoints, and backgrounds – including representatives of SSA Marine (SSA), the State of Washington, Whatcom County, the City of Bellingham, the Port of Bellingham, the Whatcom County Chamber of Commerce, Northwest Washington Central Labor Council, not-for-profit entities, and local businesses. The meetings provided an opportunity for the project team to ask questions, receive information, seek clarification, and obtain verification of its approach, assumptions, and analysis.

The project team met with the SSA representative in Bellingham and a representative of SSA was invited to – and did – participate in the project team's meeting with state officials in Bellevue. The project team welcomed the opportunity to include SSA and saw two distinct benefits from their participation: 1) an opportunity to understand SSA's process and views; and 2) provide the opportunity for SSA to raise concerns with the project team's approach and methodologies. On more than one occasion, SSA offered to provide additional information to aid in the study. Unfortunately, SSA subsequently declined to provide information or additional input.

To supplement the meetings described above, the project team reviewed extensive documentation including documents regarding the development of GPT, demographics and economic data for the City of Bellingham, Whatcom County, and State of Washington, and academic and professional research pertinent to this report. Sources of data and information are cited throughout this report in footnotes.

The projected benefits of GPT have already been the subject of a prior study – the Martin study.[1] In addition, SSA retained Finance & Resource Management Consultants, Inc. (FRMC) to review methodologies used in the Martin analysis, and that review produced a different set of projected economic impacts. While our report includes a discussion of the findings and underlying assumptions in the Martin study and FRMC's review, it does not attempt to calculate – for a third time – projected job, economic activity and tax revenue benefits that might be realized from the completion of GPT.

A traditional economic impact analysis presents projections of benefits based on known or assumed inputs to an economic model. A cost-benefit analysis calculates offsetting costs that would be necessary to realize those benefits. In this report, we provide what we hope is a broader look at overall benefits and costs as well as a discussion of risk and uncertainty related to costs and benefits. In particular, we identify the degree to which proceeding with

1 The project team discloses that PFM has previously engaged in collaborative work with Martin Associates on behalf of other clients.

development and operation of GPT might impose risks to other potential economic growth in Bellingham and in Whatcom County. Understanding those risks – and any uncertainty related to costs and benefits – should allow policymakers and the public to make a more informed decision on the merits of the project.

Thus, this report attempts to answer the following questions:

- What are the projected economic benefits of GPT?
- Are there assumptions or other factors related to the development of GPT that should be considered in assessing the economic impact of GPT on Whatcom County?
- Are there potential costs that might be borne by the public in the development of GPT that could offset projected economic benefits?
- Would the development of GPT create a risk for other potential economic growth strategies in Whatcom County?
- What should the public and policymakers understand about the risks, the potential to mitigate those risks and uncertainty related to potential costs and benefits?

This study is presented to contribute to the public discourse by presenting additional information for consideration as policy makers and the public consider the development of GPT. With that goal in mind, other communities along affected rail lines may find it useful to build upon the work contained in this document or use a similar methodology to understand the specific potential risks to their respective communities and the resulting economic impacts due to the development of GPT.

This report should not, in any manner, be construed as taking the place of the scoping process of the Environmental Impact Study (EIS), the EIS itself, or any other formal review of the project. As such, the failure to consider certain issues as part of this report and analysis should not be inferred as dismissing the importance of those issues. As with any such review, individual components of our analysis rely on the validity, accuracy, and comprehensiveness of the information supplied to us, and projections of future events and outcome are inherently uncertain and subject to change. Similarly, time and resources limit the ability to consider all factors.

III. Gateway Pacific Terminal

Overview

SSA Marine (SSA) through one of its subsidiaries – Pacific International Terminals, Inc. (PIT) – is proposing to develop Gateway Pacific Terminal (GPT) in Whatcom County.[2] In February 2011, PIT submitted a Project Information Document (PID) to the State and Whatcom County "to provide the public, the [multi-agency permitting team], decision-makers, and other stakeholders, including affected Native American Tribes, with a detailed description of the proposed project, the potential environmental effects of the project, and measures incorporated into the proposed project to reduce such effects."[3]

According to the project's website, the port is to be developed in a naturally occurring deep-water location and will be a full-service dry bulk commodity export-import facility on 1,092 acres in the Cherry Point Industrial Urban Growth Area. This area is zoned for heavy-impact industrial use and is located near the BP Refinery and INTALCO facility. The website indicates GPT would be the largest facility of its type on the west coast of the United States, capable of handling up to 54 million metric tons per year of dry bulk commodities.[4]

GPT is designed to accommodate 'capesize' ships in order to allow for the movement of the forecasted volume of dry bulk commodities. Capesize ships, which take their name from the fact that they are physically too large to fit through locks of either the Panama or Suez Canals and therefore must travel via Cape Horn or Cape of Good Hope, are capable of carrying up to 250,000 dead weight tons of cargo. Due to the natural deep-water at Cherry Point, the development does not include the need for dredging.[5] The facility is being built to accommodate 1 to 9 loaded trains per day that will travel to Cherry Point on the Burlington Northern Santa Fe (BNSF) rail line.

In addition to deep water access and projected tonnage, the Cherry Point location provides an additional benefit to PIT due to its proximity to Asia – and growing importers like China and India – when compared to other US ports. The result is a shorter duration (and associated lower cost) to deliver/return cargo.

In February 2011, SSA and Peabody Energy (Peabody) announced an agreement to initially export up to 25 million metric tons of Powder River Basin (PRB) coal per year through GPT. Peabody, the world's largest private-sector coal company, is the leading coal producer in the PRB. The agreement provided Peabody with rights to throughput over the life of the operation of GPT and the ability to expand capacity in future years.[6]

Proposed Phasing of Construction and Operations

The PID outlines two construction development stages. According to the PID, SSA (PIT) projects construction of the first phase to begin in 2013 – "when all required federal, state, and local permits and authorizations have been obtained and environmental review under the [National Environmental Policy Act (NEPA)] and [State Environmental Policy Act (SEPA)] has

2 SSA is a division of holding company Carrix, the largest US owned and privately held container terminal operator and cargo handling company in the world. In 2007, Goldman Sachs Infrastructure Partners acquired a 49 percent share of Carrix. The project team uses the abbreviations 'SSA' and 'PIT' throughout this report.

3 PID, p. 1-1.

4 Pacific International Terminals, Inc. Project Information Document, February 28, 2011, p. 4-1. The PID indicates GPT construction would occur in two phases. The first phase would allow for capacity of 25 million metric tons per year. At full build-out – after phase 2 – GPT would be designed to handle up to 54 million metric tons per year.

5 Hhttp://www.gatewaypacificterminal.comH (accessed January 4, 2012).

6 Peabody Energy Press Release, February 29, 2011.

been completed."[7] SSA (PIT) estimates that the first construction phase will be complete by 2015 and the second phase complete by 2017. After the completion of the first phase, GPT would have capacity to handle 25 million metric tons of dry bulk commodities per year. The second phase would only begin if sufficient demand is present to handle an additional 29 million metric tons per year. If so, construction of phase two would begin after the first phase is completed and operational. After the completion of the second phase, GPT would be at its maximum throughput capacity of 54 million metric tons per year. PIT estimates that construction cost for both phases will total $665 million.

Economic Impact Overview

The project team reviewed the Martin study regarding the development of GPT[8] and the FRMC review of Martin's methodologies.[9] Martin and FRMC data were produced using input-output models, though the model types varied.

Martin Associates Analysis

Martin used the BEA's Regional Input-Output Modeling System (RIMS II) multiplier for construction activity in Whatcom County.[10] Martin arrived at an estimate of 7.4 million person hours supported by direct phase one construction (based upon input construction costs of $536 million) and 10.1 million person hours of indirect and induced activity.

The analysis estimated that the operation of the terminal upon completion of phase one would create 294 direct jobs and 569 induced and indirect jobs, for a total of 863 jobs. Among the 294 direct jobs, the report estimated 170 would be members of the International Longshore and Warehouse Union (ILWU), 46 would be railroad-related, 32 would be in maritime services, 29 would be terminal operators, and 17 would be for pilots and tugs. The Martin report also estimated that upon completion of phase one construction, GPT's operation would annually generate approximately $12.0 million of local purchases and the total state and local tax benefits associated with phase one operation would be approximately $8.1 million per year.

FRMC Review of Martin Methodology

FRMC used the Impact Analysis for Planning (IMPLAN) modeling system to generate its employment estimates. FRMC used this input-output model to assess the assumed economic impact of phase one construction costs of $536 million. The IMPLAN model yields a total that is reported in person hours, but also described person hours in worker years; FRMC assumed 2,080 hours worked as a worker-year.[11] IMPLAN calculations for phase one construction yielded an estimate of 6.85 million person hours of direct employment and 5.48 million hours of induced and indirect employment.

FRMC used Martin's estimate of direct jobs created by operation of the terminal and estimated that 576 induced and indirect jobs would result, for a total of 870 jobs. The FRMC and Martin analyses differ on the potential induced and indirect employment attributable to phase one

7 PID, p. 4-1. The US Army Corps of Engineers, the WA Department of Ecology, and Whatcom County will conduct a coordinated environmental review under the NEPA and SEPA. The US Army Corps of Engineers has determined that an EIS is required. Additional information regarding these processes may be obtained at:

Hhttp://www.ecy.wa.gov/geographic/gatewaypacific/

Hhttp://www.co.whatcom.wa.us/pds/plan/current/gpt-ssa/index.jsp

8 Martin Associates, "The Projected Economic Impacts for the Development of a Bulk Terminal at Cherry Point." July 2011.

9 Finance & Resource Management Consultants, Inc., "Review of Martin Associates Economic Impact Study." October 2011.

10 The BEA indicates that, "RIMS II provides users with five types of multipliers: final-demand multipliers for output, for earnings, and for employment and direct-effect multipliers for earnings and for employment."

11 A person working a 40 hour week for 52 weeks a year will work 2,080 hours.

construction. The FRMC estimate of indirect and induced jobs is 45.7 percent below that of Martin's assessment. Due to this difference, and a slightly smaller direct jobs estimate (7.5 percent less), the FRMC estimate for total person hours is 29.5 percent below the Martin assessment.[12] As FRMC notes, the variance could be due to classifications used as well as the different input-output models used in each analysis.

SSA (PIT) Projection

SSA (PIT) projects that during construction of the first phase, GPT would create approximately 3,600 job years per year and provide $74 million in tax revenue for state and local governments during the estimated two-year construction period.[13] This includes 1,700 direct job years[14] and 1,900 indirect[15] and induced job years annually.[16]

Once operating, after the first phase of construction, SSA (PIT) projects that GPT will provide over $8 million per year in state and local tax revenues as well as create 867 ongoing jobs (294 of which are direct jobs).[17]

If there is demand for additional capacity, SSA (PIT) projects that the second construction phase of GPT would create an approximate addition of 840 job years[18] annually and provide an additional $18 million in tax revenue for state and local governments during the estimated construction period. This phase would include approximately 400 direct job years[19] and 440 indirect and induced job years annually.[20]

At full operation upon completion of the second phase, SSA (PIT) estimates GPT would provide over $11 million per year in state and local tax revenues as well as create 1,250 ongoing jobs (430 of which are direct jobs – including the original 294 direct jobs from the operation of phase one).[21] SSA (PIT) projects the direct jobs to pay an annual average wage of $94,900.[22]

There is an important distinction to be made between the discussion of job years during the construction phases and permanent jobs projected to be created during operation of the terminal. Construction jobs are temporary in nature because once a structure or entity is built and operational, the construction ceases. On the other hand, jobs created during terminal operation are projected to be ongoing – and thus more likely to have a permanent impact on the local economy.

Martin and FRMC both discuss person-hours and do not convert the person-hours to 'jobs' because the length of the construction period is uncertain. As FRMC notes, the person-hours

12 FRMC's review of phase two estimates of construction direct jobs and induced and indirect jobs resulted in similar divergences from Martin; most notably in induced and indirect jobs.

13 Job years includes direct, indirect and induced jobs. The information below sets forth the employment impact projections that appear on the GPT website: the employment impact is an average of the Martin and FRMC estimates. Where employment estimates, timing, or other details diverge from the PID, the project team represents the figures provided on the GPT website because those figures appear to have been more recently revised and the PID is a static document from February 2011.

14 SSA (PIT) defines direct jobs are those jobs directly generated by the construction of the terminal.

15 SSA (PIT) defines indirect jobs as those jobs that are created locally due to purchases of goods and services by firms for the construction of the Terminal.

16 SSA (PIT) defines induced jobs as those jobs that are created throughout the local economy because individuals directly employed by the activity at the terminal will spend their wages locally on goods and services (i.e. food, housing and clothing).

17 Includes direct, indirect, and induced jobs.

18 This figure is the average of the Martin and FRMC estimates.

19 This figure is the average of the Martin and FRMC estimates.

20 This is the average of the Martin and FRMC estimates.

21 These figures include the phase one job years (867) and revenues ($8 million).

22 Hhttp://gatewaypacificterminal.com/economic-benefits/creating-new-jobs/H (accessed January 4, 2012).

number is difficult for a typical individual to interpret. FRMC suggests a "conversion of person hours to job years (i.e. the number of workers it would take to build the project in one year), which can be used as well in place of the number of 'jobs' and would make the findings generally more interpretable."[23] The project team uses job years to discuss potential employment during construction, not 'jobs.'

One way to think about this is over a fixed period of time. Over a 10 year period, based on the projections provided by SSA (PIT), construction and operation of phase one would lead to:

- 3,400 direct job years and 3,800 induced and indirect job years during the two year construction phase
- 294 direct jobs per year and another 573 induced and indirect jobs per year – a total of 2,352 direct job years and 4,584 indirect and induced job years during the first eight years of operation

Taken together, based on SSA's (PIT's) projections, GPT would produce the equivalent of an average of 575 direct jobs and 838 indirect and induced jobs per year during the first 10 years of construction and operation.

Assumptions and the Impact of Projected Economic Benefits on Whatcom County

The project team did not review – and therefore has no basis for questioning – the methodology utilized by Martin Associates or FMRC. Nor did we conduct our own independent impact analysis. In considering the projected economic benefits of the GPT project, however, it is important to understand some of the underlying assumptions of those projections and the resulting impact specifically on Whatcom County.

Phase I Construction Jobs are Unlikely to be Created Until 2016 and Permanent Jobs are Unlikely to be Created Until 2018

Critical data and assumptions were provided to Martin Associates by SSA (PIT) including the projected construction phasing, projected cost of construction, projected terminal employment, throughput assumptions, and salary ranges for select terminal employees.

SSA (PIT) provided Martin with a timeline that assumed terminal operations begin in 2015, with permitting completed in 2012 and construction beginning in 2013.[24] The timeline, however, is subject to change. First, representatives of SSA suggested that actual construction would depend on contractual guarantees for throughput. Second, the timing of construction depends on the completion of the EIS process. State officials told the project team that the scoping process for the EIS is likely to begin in the first or second quarter of 2012.

The scoping process and the final EIS must both be completed before the projected two-year construction timeline begins. While some officials estimated the EIS could be completed within two years, a greater number of parties suggested the process could take up to four years to complete. As a result, construction jobs would not be created until 2016 and permanent jobs would not be created until 2018.

23 FRMC, p.3.

24 Martin, p. 1.

Most, but not all, GPT Jobs Will Go to Whatcom County Residents

Even if all SSA (PIT) projected job gains are realized, not all jobs created as a result of the construction and operation of GPT will go to residents of Whatcom County.

During the construction of large scale projects, it is typical that a significant number of workers come from other parts of a region (or nationally) – on a temporary basis – to the project location for short-term work assignments. Our understanding is that construction of GPT would be the subject of a project labor agreement (PLA) with local labor unions, guaranteeing that all work on the site goes to a unionized labor force. PLAs appear to reduce the use of non-local labor on major construction projects, both through explicit local hiring requirements and by reducing the use of 'independent contractors' as part of the labor force.[25]

The ability to staff the construction phase of the project will depend upon the capacity of the local construction workforce. Based on the number of job years and the projected construction period, phase one of GPT construction will require approximately 1,700 construction workers per year. Peak construction employment in the Bellingham MSA reached 6,310 in 2006 – some 1,900 more construction jobs than in 2010.[26] The combination of the PLA and existing capacity in the local construction workforce suggests that the majority of construction jobs during phase one will be held by local workers.

Yet, even if a PLA requires that all – or most – workers on the construction of GPT are local residents, it would have no effect on the share of induced and indirect jobs during construction, direct jobs during operation or induced and indirect jobs during operation going to non-Whatcom County residents.[27] Currently, among the general workforce, approximately 21.0 percent of jobs in Whatcom County are held by non-Whatcom County residents. This could suggest a similar percentage of induced and indirect jobs from GPT construction – as well as direct, induced, and indirect jobs from GPT operation – would go to non-Whatcom residents.[28]

Most GPT Tax Revenue Will Go to the State, Not Local Government

The Martin report defines the tax impact as "tax payments to the state and local governments by firms and by individuals whose jobs are directly dependent upon and supported by (induced jobs) activity at the bulk terminal."[29] Thus, projected tax benefits include taxes that are the direct result of the construction and operation of GPT – such as sales tax related to goods purchased during construction – and taxes that are the result of indirect and induced economic activity – such as property taxes paid by individuals who are employed as a result of jobs created by GPT's activity.

Martin used SSA's (PIT's) estimated phase one construction cost ($536 million) to project state and local tax impact of $74.4 million. Similarly, SSA's (PIT's) projected annual throughput of 25 million metric tons (upon completion of phase one construction) was used to project the

25 See, Uyen Le and Lauren Applebaum, "Project Labor Agreements in Los Angeles: The Example of the Los Angeles Unified School District," UCLA Institute for Research on Labor and Employment, December 2011 at Hhttp://www.irle.ucla.edu/publications/pdfs/ResearchBrief11.pdfH.

26 US BLS OES 2000-2010 data.

27 In understanding the effect of the project on local employment, it is worth noting that not all directly created jobs will go to individuals who are currently unemployed. In fact, as is the case with many new jobs, the likely beneficiaries are individuals who are already currently working. See: Geoffrey C. Ho, Todd L. Pittinsky, Margaret Shih, Daniel J. Walters. "The Stigma of Unemployment: When joblessness leads to being jobless." UCLA Institute for Research on Labor and Employment, December 2011. Thus, employment projections measure the net impact – i.e. by creating new vacancies in other positions, the effect will be to create a net increase in employment.

28 US Census Bureau 2009 OnTheMap data.

29 Martin, p. 3.

associated state and local tax impact of $8.1 million.[30] These tax revenue projections are based on both direct activity related to the terminal and related economic activity.

Most tax benefits from the project will likely go to the state, rather than to local governments. Every state has a different tax structure. Nationally, in 2009, state governments received 56.3 percent of general revenue tax dollars that were collected by state and local governments. In most states – all but five – state tax share exceeded local government share. In Washington, 60.8 percent of general tax revenue went to the state government.[31]

The precise division of revenue generated by GPT will depend, to a certain degree, on the types of tax revenue generated by the project.

Sales and property tax revenue are among the largest sources of revenue for both state and local governments in Washington. Washington does not have a state personal or corporate income tax.

According to the City of Bellingham – the largest city in the Whatcom County and the location of 60 percent of total jobs in the County – 75 percent of sales tax revenue collected in the Bellingham goes to the State of Washington; 10 percent goes to the City; 7 percent goes to the Whatcom Transportation Authority; 2 percent each goes to Whatcom County and the Transportation Benefit District; and 1 percent each goes to jail construction, the criminal justice fund, EMS, and the County mental health tax. Statewide, general sales tax revenue (not including taxes on alcohol, tobacco, gasoline or utilities) accounted for 21.7 percent of local government tax revenue in Washington in 2009.[32]

According to the Whatcom County 2011 Tax Book, approximately 33 percent of all property tax revenue goes to school districts; 24 percent goes to the State; 11 percent goes to both the City and the County; 7 percent goes to road districts; and 6 percent goes to fire districts. No other entity receives more than one percent of property tax revenue. Statewide, property tax revenue accounted for 59.8 percent of local government tax revenue in Washington in 2009.

Based on the above information, and accepting the SSA (PIT) tax revenue projections, it is possible to roughly model likely revenue flow during the first decade of construction and operation of Phase I:

30 Martin, p.3.

31 US Census Bureau, 2009 Annual Surveys of State and Local Government Finances.

32 City of Bellingham, obtained from: Hhttp://www.cob.org/documents/finance/publications/sales-tax-distribution.pdfH.

Ten-Year Revenue Projection (all dollars in millions)[33]

Year	1	2	3	4	5	6	7	8	9	10
Total State and Local Revenue	**$37.0**	**$37.0**	**$8.0**	**$8.0**	**$8.0**	**$8.0**	**$8.0**	**$8.0**	**$8.0**	**$8.0**
State Revenue	$22.5	$22.5	$4.9	$4.9	$4.9	$4.9	$4.9	$4.9	$4.9	$4.9
Local Revenue	$14.5	$14.5	$3.1	$3.1	$3.1	$3.1	$3.1	$3.1	$3.1	$3.1
Local Property Tax Revenue[34]	**$8.7**	**$8.7**	**$1.9**	**$1.9**	**$1.9**	**$1.9**	**$1.9**	**$1.9**	**$1.9**	**$1.9**
Schools	$3.8	$3.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8	$0.8
County Government	$1.3	$1.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3
City Government	$1.3	$1.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3
Road District	$0.8	$0.8	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2
Fire District	$0.7	$0.7	$0.1	$0.1	$0.1	$0.1	$0.1	$0.1	$0.1	$0.1
Local Sales Tax Revenue	**$3.1**	**$3.1**	**$0.7**	**$0.7**	**$0.7**	**$0.7**	**$0.7**	**$0.7**	**$0.7**	**$0.7**
City[35]	$1.4	$1.4	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3	$0.3
County (including WTA, Jail, Mental Health, CJ,EMS)	$1.8	$1.8	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4

33 Just as not all employment will go to Whatcom County residents, at least some of the local tax revenue will likely go to cities, counties and districts outside of Whatcom County.

34 Does not include property tax revenues that go to support State entities.

35 Does not include Transportation Benefit District revenue.

IV. Potential Public Costs Related to Development and Operation of Gateway Pacific Terminal

The PID outlines infrastructure costs in the immediate area surrounding the GPT at Cherry Point. Issues such as at-grade rail crossings – meaning they are on the same level as vehicular traffic – and traffic congestion are detailed. The PID also suggests that the operational cost impacts in the immediate area of Cherry Point may be minimal – with greater instance during construction phases than operational phases.[36]

The PID does not address infrastructure-related costs along this rail line (either in Bellingham or other communities through which it travels) such as crossings, improvements, realignments, bypasses, overpasses, and separations. The PID mentions that the Bellingham Subdivision main line connects to the Cherry Point Line (Railway Custer Spur).[37] The Bellingham Subdivision main line is operated by BNSF and, as its name indicates, runs through Bellingham – much of the way along the waterfront.

Bellingham, as the hub of retail activity in the County, may have a greater use of its public infrastructure due to the development of GPT (roads, water and sewage systems, etc.) than other areas of the County. Without a consistent revenue stream to offset increased costs, the City, and potentially other communities along the BNSF railway, could face increased budget pressures in an already strained fiscal environment.

Rail crossing data from the Federal Rail Administration (FRA) indicate there are 29 active rail crossings in Bellingham on the BNSF rail line in question.[38] Of the 29 crossings, 2 are private crossings, 24 are public crossings, and 3 are pedestrian crossings. Of the public crossings, 16 are at-grade crossings and the other 7 are over/underpasses.

According to a 2009 report prepared for the Washington Department of Transportation (DOT) and Washington Public Ports Association, in 2008, an average of 15 trains per day traveled north from Everett on the BNSF line.[39] The report indicates the line has a maximum capacity of 18 trains per day. By 2028, the report projects that maximum capacity would be 30 trains per day and traffic would be approximately 24 trains per day.

The PID indicates that upon completion of Phase I and operation of the GPT, an additional 5 loaded trains will travel to GPT along the train route through Bellingham on a daily basis. The PID states up to 9 loaded trains are projected to arrive on a daily basis upon completion of Phase II.[40] There may be additional rail traffic attributable to empty/unloaded trains returning from GPT.

SSA (PIT) anticipates servicing GPT using 7,000 foot-long trains (approximately 1.3 miles) and eventually 8,500 foot-long (approximately 1.6 miles) trains may be used.[41] The PID makes no mention of the potential infrastructure costs to remediate infrastructure and other service issues such as at-grade rail crossings, traffic congestion, access issues for business and commerce, access issues for recreational parks, or related issues. Similarly, the PID does not discuss additional operation costs such as maintenance, emergency management, and public safety along the rail line.

36 PID, pp. 5-91 – 5-130.

37 PID, p. 5-103.

38 FRA data available at: Hhttp://safetydata.fra.dot.gov/OfficeofSafety/publicsite/crossing/crossing.aspx

39 BST Associates, HIS Global Insight, and Mainline Management, Inc. "2009 Marine Cargo Forecast – Technical Report." March 23, 2009. A June 2011 study by Cascadia Center for Regional Development indicates that BNSF reports an average of 15 trains per day.

40 PID, p. 4-51.

41 PID, p. 4-31.

The project team met with Bellingham City officials and discussed the potential costs and challenges associated with increased rail traffic along the rail line. City officials identified three primary points of concern.

First, access to certain areas of the waterfront could be severely restricted or cut off. From a public use standpoint, this could be a concern as residents and tourists routinely use the City's parks and trails for recreational activities. Additionally, public safety and emergency service access to the waterfront could be jeopardized if a train was stopped or moving slowly through the rail line that separates some portions of the waterfront from the rest of the City.

A second concern was the safety of the rail crossings in the City. Many of the rail crossings in the City are 'at-grade.' Traffic delays, and increased traffic and use of side streets as a result of increased rail traffic (and longer trains) may cause greater wear and tear on main thoroughfares and alternate roads, a higher need for traffic management and direction activities, and overall challenges to move throughout the City (particularly in and around the waterfront area). Absent any mitigation, there is concern that the City's costs will increase and ease of transportation may suffer.

The third concern was noise impact for residents and businesses in Bellingham. Rail traffic results in two different types of noise. Some noise is experienced as a result of vibrations due to train movement and most greatly affects residents living close to the rail line. As trains pass through Bellingham, they are also required to use their horns as a safety precaution going through at-grade crossings.

Fully addressing these concerns would require infrastructure investments to eliminate at-grade crossings through the creation of either overpasses or re-routing of the rail line. Absent detailed engineering studies, the total cost of these investments is outside the scope of this report.

Noise reduction – related to train horn use – could be achieved through the creation of quiet zones pursuant to Federal Railroad Administration (FRA) rules. A September 2007 study prepared for the City of Bellingham notes that "[I]mplementing a quiet zone will not guarantee that the train will stop blowing its horn at all times and in all situations. A quiet zone will only reduce the train horn noise."

Quiet zones would require capital investments – gates and signage – and maintenance. The 2007 report evaluated the creation of two quiet zones in Bellingham – a Fairhaven zone (5 grade crossings) had a projected capital cost of $1.3 to $2 million. A waterfront zone (7grade crossings) had a projected capital cost of $1.4 to $3.5 million. At the time, there was also a projected annual maintenance cost of $5,500 per crossing, per year.

It remains unclear what party or parties would be responsible for bearing these costs – both in and around Cherry Point and in communities like Bellingham along the rail line that would require mitigation for commercial, public, or safety interests.

The project team spoke with County officials, who indicated the County would not pay for any mitigation-related expenses. SSA (PIT) does not address such costs in their PID outside of the immediate Cherry Point area. Thus, mitigation costs and/or the associated economic and quality of life losses likely to occur absent mitigation could be borne by the communities along the rail line and would reduce the net fiscal benefits – offsetting the projected local government tax revenue discussed in the prior section.

V. GPT Related Risks to Economic Development

To address the question of whether development and operation of GPT would put at risk other economic development, it is important to understand the recent economic history of Bellingham and Whatcom County.[42]

- Employment: From 2001 to 2010, the Bellingham MSA's rate of job growth was almost four times the state rate. The Bellingham MSA (Whatcom County) added 8,100 non-farm jobs – an 11.6 percent increase. Statewide, non-farm jobs grew by 3.0 percent. Compared to the state, the Bellingham MSA grew jobs at a greater percentage or shed jobs at a smaller percentage for every super-sector for which data were available.

- Population Growth: From 2000 to 2010, Bellingham and Whatcom County both grew in population by slightly more than 20 percent – greater than the State's growth rate of just over 14 percent. The US Census Bureau reported Bellingham's 2010 population as 80,885, an increase of 13,714 individuals from the 2000 Census. Whatcom County's 2010 population of 201,140 represented an increase of 34,326 from the 2000 Census. Migration played in important role in driving the increase. New residents – most from other parts of Washington, but significant numbers from other states as well – brought new income with them: IRS data suggest that Whatcom County realized a net growth of over $172.3 million in aggregate Adjusted Gross Income (AGI) from migration between 2004 and 2010.

- Income and Wages: Whatcom County's inflation adjusted per capita income has consistently been below both the State and US averages since 1969. Average earnings per job in Whatcom County have consistently lagged the Washington average since 1987 when the data set began; Whatcom County also remained below the State and US average earnings per job, while Washington has been largely been near or above the national average. Between 2000 and 2008, however, Whatcom County's per capita income grew at a compound annual growth rate (CAGR) of nearly double that of the nation and significantly greater than the State. Whatcom County's CAGR was 2.1 percent; US CAGR was 1.1 percent, and Washington's CAGR was 1.3 percent.

- Bellingham's Importance to the Regional Economy: Approximately 60 percent of jobs in Whatcom County are located in Bellingham and the City accounts for approximately 76 percent of all retail sales in Whatcom County. Bellingham – with just over 1 percent of the County's total square miles also accounts for nearly 36 percent of the County's total assessed value of real property.

The State of Washington currently projects that population will grow in Whatcom County at an average annual rate of 1.5 percent between now and 2030. Similarly, the State projects employment growth in Whatcom County at a rate that would lead to 15,000 new jobs in Whatcom County by 2021. These projections are based, in part, on the County's relative economic strength over the last decade.

42 The project team reviewed economic data for the State of Washington, Whatcom County, and Bellingham and analyzed the data to quantify several important economic factors. In certain instances, data are only available for Whatcom County and/or the Bellingham metropolitan statistical area (MSA) (the MSA is defined as Whatcom County) and not at the City level for Bellingham. In these cases, City-level data are not included. Additional detail and content are available in the appendices of this report and specific sources for the economic findings are detailed in footnotes to those appendices.

Assessing Risks

A more detailed analysis might identify other potential risks, but for the purposes of our analysis we focus on three possible GPT-related scenarios that would put economic growth in Bellingham and Whatcom County at risk:

- Development and operation of GPT could reduce the projected baseline growth in population and employment
- Development and operation of GPT could reduce the possibility of redevelopment of the Bellingham waterfront
- Development and operation of GPT could limit potential population and job growth related to tourism, in-migration of skilled workers and entrepreneurs

Rail Traffic

An increase in rail traffic through Bellingham resulting from the operation of GPT discussed above could increase the likelihood of all three of the risk scenarios. An increase in rail traffic could:

- Limit access to and redevelopment of the waterfront, its businesses, and recreational areas for residents and visitors
- Increase noise and nuisance making Bellingham less of a livable city and less attractive to tourists
- Reduce the capacity of existing rail infrastructure to provide service for residents and visitors

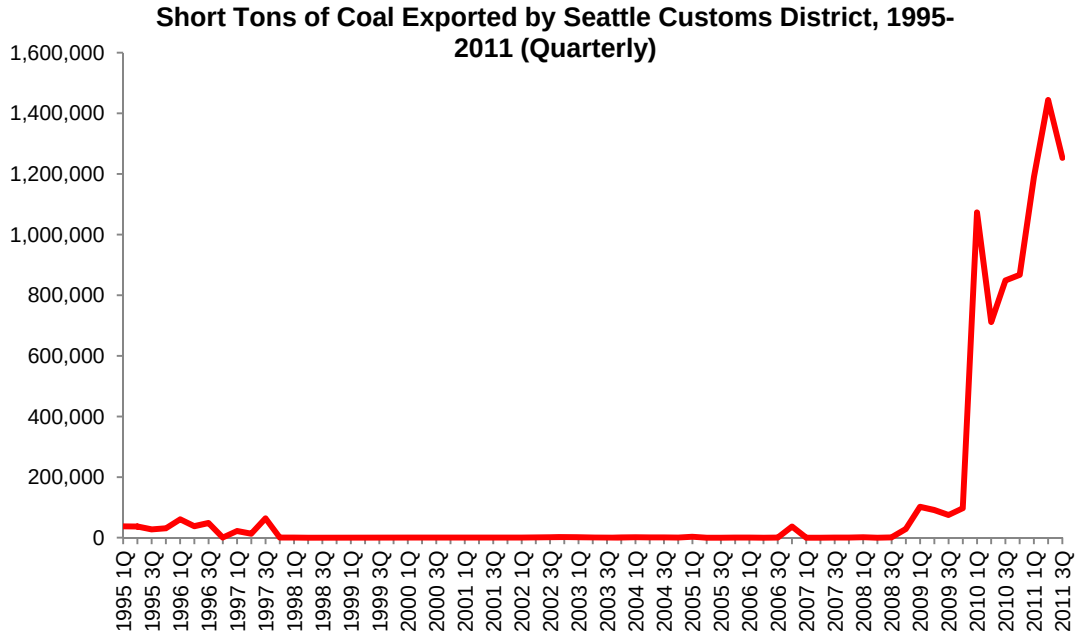
As noted above, rail traffic already travels through Bellingham on a daily basis. Rail traffic has recently increased due to the increase in transport of coal through Canadian ports. Statewide, DOT reported that as of 2007 10.6 million tons of coal was moved by train in Washington each year.[43] More recent data, however, suggest that amount has increased – with a specific increase due to exports that affect the rail line through Bellingham.

The project team reviewed reports that indicate most, if not all, coal from the Seattle Customs District is transported to Canada, primarily on trains that run through Whatcom County and Bellingham.[44] US Customs and Border Patrol data indicate that the Seattle Customs District (which encompasses Northwest Washington – including Whatcom County) experienced a significant increase in the amount of coal exported beginning in 2009 and 2010.[45] Prior to 2009, the annual volume of coal exported by the Seattle Customs District was often below 30,000 short tons per year – in some instances below 5,000 short tons per year. From 2010 through the 3rd quarter of 2011, the average quarterly short tons exported by the Customs District was 1.1 million short tons; approximately 4.4 million short tons on an annual basis. The graph below displays the 1995-2011 quarterly short tons of coal exported by the Seattle Customs District.

43 WSDOT 2010-2030 Freight Rail Plan, p. 4-21. This data likely includes the coal consumed at the Centralia power plant. A recent agreement was reached to end the use of coal-fired generators (one in 2020 and the other in 2025). This may alter the amount of coal tonnage projected to move through Washington in the future and would not be included in the above projections.

44 PFM did not perform its own analysis of this statement.

45 US Customs and Border Patrol Quarterly and Annual Reports, 1995 to present.



Source: US Customs and Border Patrol Quarterly and Annual Report 1995-present

PIT projects the first phase of GPT to handle 25 million metric tons (approximately 27 million short tons) of throughput on an annual basis – much of which would be coal.[46] This suggests that the amount of coal moving through Bellingham by rail could increase six-fold.

More and longer trains will increase the amount of time that rail crossings in Bellingham are blocked. This will impact businesses currently located on the waterfront side of the rail tracks that can only be accessed by at-grade crossings. More and longer trains also may result in greater noise – both noise related to blowing of train whistles to comply with rail crossing rules and noise for property owners; including those immediately abutting the tracks and those nearby.

It is also likely that the additional rail traffic will have a negative impact on the property value of residential properties that abut the rail lines. A November 2011 study examined the impact of rail freight traffic on home values in Los Angeles after the Alameda Corridor, an urban infrastructure project in Los Angeles, consolidated most rail traffic into and out of San Pedro port facilities into one higher capacity rail line.[47] The study measured the impact of increased rail traffic along one corridor and the decreased traffic elsewhere. On average, the study found approximately a 2.0 percent decrease in average home value where rail traffic was more prevalent and approximately a 0.6 percent increase in home value where rail traffic was reduced.

Lower property values resulting from increased rail traffic could have an impact for all residents of Bellingham and Whatcom County – not just the individual property owners. As noted earlier, sales price data suggest that properties in the Fairhaven, South Hill, and Edgemoor sections of Bellingham had among the highest values in the County. Thus, a loss in property value of these properties could also eventually lead to reductions in property tax revenue.

46 Upon completion of phase two, GPT's throughput is projected to be approximately 54 million metric tons per year.

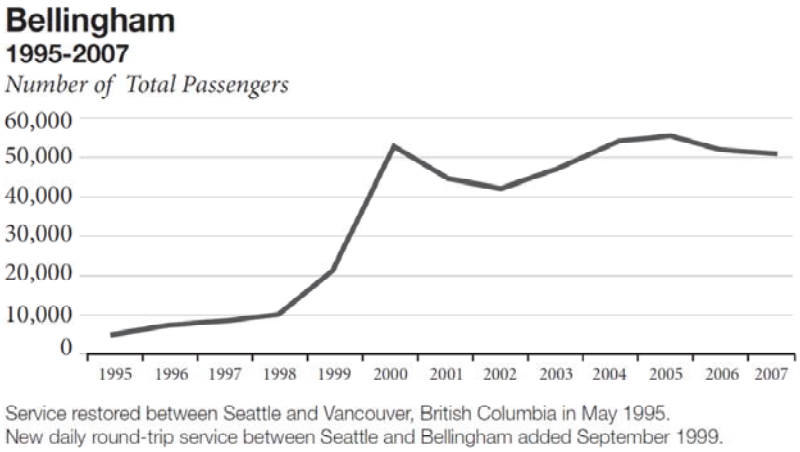
47 Michael Futch. "Examining the Spatial Distribution of Externalities: Freight Rail Traffic and Home Values in Los Angeles, (November 2011).

Even those properties not directly affected by additional rail traffic could suffer from proximity to properties that are affected. Stigma – associated with proximity to the increase in rail traffic or even resulting specifically from the fact that the rail was increasingly being used to transport coal – could affect property value even if the properties would not be affected by additional noise.[48]

On the other hand, the negative impact on property value of properties near or abutting rail tracks could be offset by increased property values in Bellingham or Whatcom County that are not near the rail traffic. To the extent that demand would remain consistent for property in or near certain areas, the values of affected properties could bear a discount while other properties nearby enjoy a premium.

An increase in rail freight traffic could also limit the use of passenger rail in Bellingham and Whatcom County. In 2010, the Amtrak *Cascades* service had total passenger on-offs in Bellingham of 62,562, an increase of nearly 20,000 per year from 2002 levels.[49] Some of the County's tourism industry – discussed in detail below – is dependent on passenger rail. Increased use of tracks in and near Bellingham for freight access to GPT could limit passenger rail and impact tourism.

***Cascades* Total Passengers – Bellingham**



Source: WSDOT, Amtrak *Cascades* Ridership and Station On-Off Information, March 2008

Highest and Best Use of former Georgia Pacific site in Bellingham

Redevelopment of the Bellingham waterfront has been the subject of significant planning and investment. Much of the proposed redevelopment activity centers on the former Georgia Pacific (GP) site.

From the early 1960's through the early 2000's, GP was the heart of the Bellingham waterfront, producing not only consumer and industrial goods, but also significant employment for the region – employing as many as 1,200 workers in the late 1970's. By 2001, the company ended its pulp-mill operations, but continued its tissue-manufacturing operations through 2007, when it

48 Two example studies reviewed were:

Kevin J. Boyle, Nicolai V. Kuminoff, Congwen Zhang, Michael Devanney, and Kathleen P. Bell. "Does a Property-Specific Environmental Health Risk Create a 'Neighborhood' Housing-Price Stigma? Arsenic in Private Well Water." September 2009.

Kai-yan Lee. Federal Reserve Bank of Boston. "Examining REO Sales and Price Discounts in Massachusetts." September 2010.

49 WSDOT, "Amtrak Cascades 2010 Performance Report", May 2011.

closed all operations at the site.[50] During its operational years, the site produced a myriad of products including tissue products, sulfuric acid, paperboard, chlorine, and sodium chlorate, among others. The manufacturing processes caused odors that led some to refer to the City as 'Smellingham." In addition to the noticeable odor from the GP site, the site's operations also resulted in the introduction of harmful chemicals to the waterfront and Bellingham Bay.

Over the past decade, significant time, energy, and money have been contributed by the State, Port, City, and the City's Public Development Authority (PDA) in efforts to remediate the site and create a new game-changing redevelopment plan for the City and region. While the plans of the PDA and Port plans are not the same, they are complementary and both suggest the opportunity for significant private investment and economic opportunity.

In 2005, the Port of Bellingham (Port) purchased the property known as Georgia Pacific West as part of its long-term plan, in partnership with the City, to transform the larger 216.3 acre Waterfront District.[51] Part of this plan calls for the formulation and implementation of "a Master Development Plan for the Waterfront District that would gradually transform this historically industrial waterfront property into a new neighborhood with residences, shops, offices, marine and light industry, and institutional uses [e.g. Western Washington University], as well as parks, trails and shoreline improvement" along the Bellingham Bay.[52]

The Port's Final Environmental Impact Statement (FEIS) – submitted in July 2010 – indicates that "substantial new opportunities for public access to the waterfront that do not exist under current conditions" would be part of the project. The Port projects the full build out of the project – occurring over a 20 year period – to include "a diversity of uses that are complimentary to the downtown Bellingham [CBD], Old Town, and surrounding neighborhoods; an infrastructure network that integrates with and connects the waterfront to the surrounding area; and, a system of parks, trails and open space that opens up the waterfront to the community."[53] A map of the proposed preferred option follows:

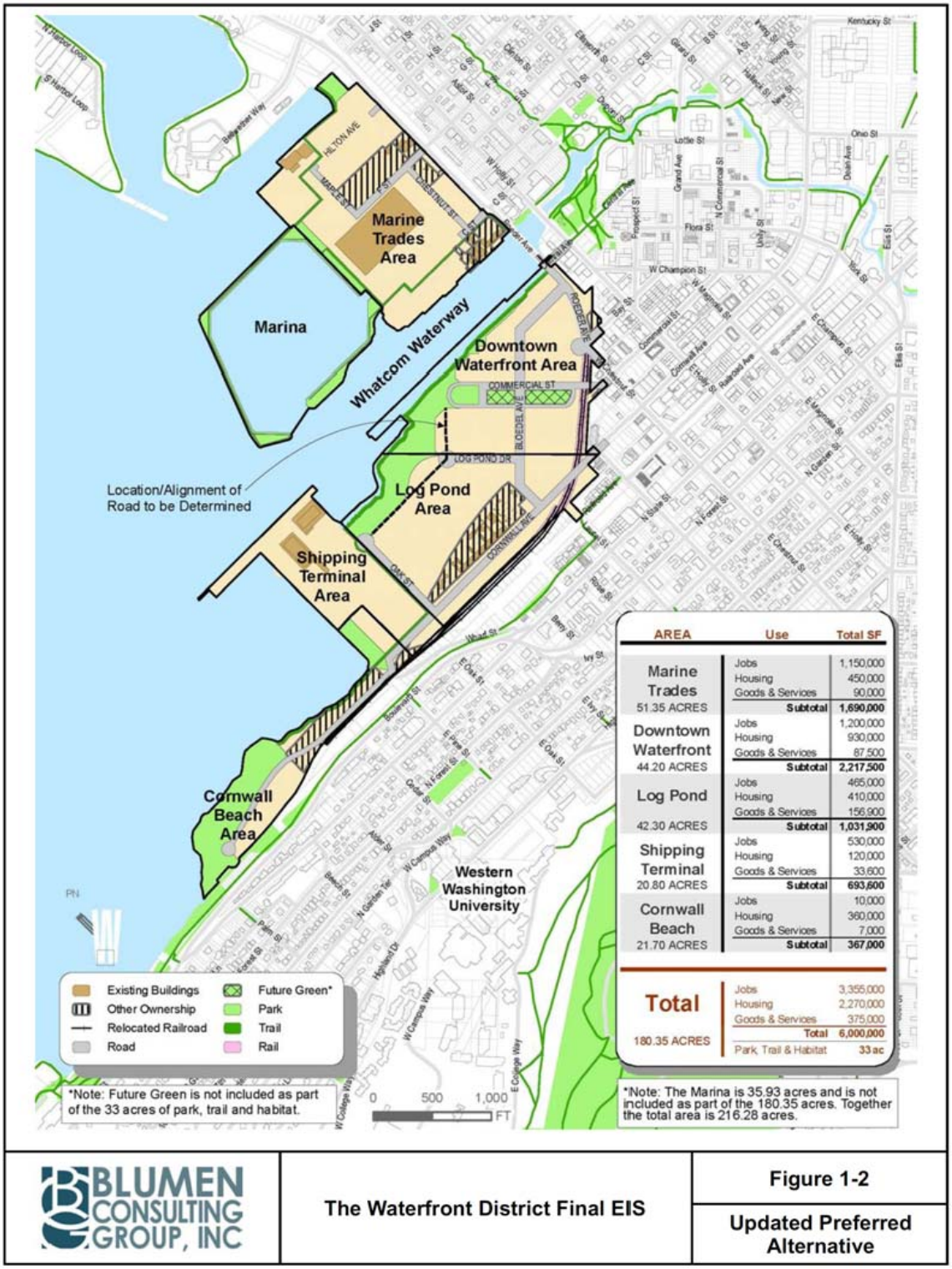
50 Port of Bellingham data.

51 The GP-West site required extensive environmental cleanup was necessary and as of December 2011, the first phase of interim cleanup was completed. This initial phase cost approximately $1 million and the State Department of Ecology is reimbursing all costs incurred by the Port for cleanup at the site. In the spring of 2012, it is anticipated a second phase – removing contaminated soils/debris and demolishing a building – will be completed.

52 Port of Bellingham (Port), The Waterfront District Redevelopment Project, Final Environmental Impact Statement (FEIS), July 2010.

53 Port, FEIS.

Port of Bellingham – Waterfront Redevelopment Preferred Alternative



BLUMEN CONSULTING GROUP, INC

The Waterfront District Final EIS

Figure 1-2

Updated Preferred Alternative

The Port of Bellingham's current plan calls for:[54]

- Redevelopment of 6 million square feet of office and commercial space
- 1,892 housing units
- Site population of 3,614 residents
- Up to 460 slips
- 33 acres of public parks and open space
- Maximum building heights

The redevelopment of the GP site is well beyond the planning phase. A September 2010 draft SubArea Plan estimates that the Port and City costs would be approximately $365 million for environmental remediation, streets, infrastructure, and parks to prepare the site for redevelopment.[55] At full build out, the Port suggests the project would potentially attract upwards of $1 billion in public (i.e. university) and private development. Some of this funding will come from other government sources (i.e. State grants, etc.). Combined, the Port and the City have received and authorized approximately $41 million of State grant funds and their own funds to remediate the waterfront and to plan for its future development.

State Grants Received by Port of Bellingham for Remedial Action

Description	Dates		Agency Funding
	Effective	Expires	
Current Ecology MTCA Grants			
Central Waterfront (2)	1/1/2009	12/31/2012	$2,604,057
Cornwall Avenue (2)	1/1/2009	12/31/2012	$3,166,650
GP Mill (1)	1/1/2004	12/31/2012	$5,681,472
Whatcom Waterway (2)	12/1/2006	12/31/2013	$26,047,141
Sub-total			***$37,499,320***
Closed Ecology MTCA Grants			
Central Waterfront (1)	4/1/1998	12/31/2010	$646,736
Cornwall Avenue (1)	1/1/2005	11/30/2009	$90,000
Whatcom Waterway (1)	5/1/2004	3/31/2008	$348,300
Sub-total			***$1,085,036***
Total			**$38,584,356**

54 Port, FEIS.

55 Port of Bellingham's Draft SubArea Plan, Chapter 8 – Capital Facilities, September 2010.

Authorized Joint City/Port Expenditures for New Master Plan for City Waterfront

Task	Total Cost	City share (50%)	Port share (50%)
Preliminary Design	$300,000	$150,000	$150,000
Outside funding	$250,000	$125,000	$125,000
Branding	$60,000	$30,000	$30,000
SEPA (EIS)	$854,174	$427,087	$427,087
Assumptions, market	$315,332	$157,666	$157,666
EIS data support	$655,626	$327,813	$327,813
Public Involvement	$118,256	$59,128	$59,128
Master Plan	$393,000	$196,500	$196,500
Devel. Regulations	$164,000	$82,000	$82,000
LEED ND	$20,000	$10,000	$10,000
Total Authorized Joint Expenditures	**$3,130,388**	**$1,565,194**	**$1,565,194**

Source: Port of Bellingham

In addition to the remediation efforts, the City's PDA is moving forward with the first steps toward actual redevelopment.[56] As part of its October 2011 strategic plan, the PDA has identified five potential priority projects including four related to waterfront redevelopment.

The Army Street Project would serve as a jumping off point for waterfront redevelopment.[57] According to plans, the project "would span the BNSF railroad tracks and Chestnut Street/Roeder Avenue, including properties on both sides, providing a major urban plaza and pedestrian connection joining the Central Business District, Old Town District and the Waterfront District."[58] The project area would include two acres north of the BNSF rail tracks and 22 acres south of the tracks within the former GP West property.

As of 2011, PDA estimates that the waterfront's "total build-out value could be in the realm of $350 million with public sector undertaking $120 million and the private sector...$230 million. [T]his public investment would yield benefits reflecting a 'whole greater than the sum of its parts' in terms of the multiplier effects of higher development feasibility and asset values in the CBD and Old Town."[59] The Strategic Plan estimates that earliest development and construction would be projected for 2015 or 2016.

PDA notes that "[a]n attractive, safe and convenient access way between the CBD/Old Town and the GP West property is considered a fundamental key to successful development of this portion of the waterfront and for the CBD (and Old Town) to accrue economic benefits from development of the Army Street Project."[60] The PDA indicates that without such an access way, the "barrier imposed by the inconvenience and hazard of an at-grade crossing of the combination of the trail tracks and Chestnut/Roeder will...negatively [impact] development feasibility...and would be aggravated by increased vehicular or rail traffic if not mitigated."[61] The

56 Bellingham Public Development Authority mission statement: "to maximize the public good by attracting sustainable development that generates capital investment, contributes to the vitality of the economy, and creates employment opportunities, while improving and preserving those historical and environmental assets that define the city's character." The PDA is an independent legal entity created by the City to develop public properties together with private investment, focusing on Bellingham's Waterfront, Old Town, and Downtown districts.

57 Bellingham Public Development Authority (PDA) Strategic Plan CY2011-CY2015, adopted October 25, 2011.

58 PDA Strategic Plan, p. 6.

59 PDA Strategic Plan, p. 16.

60 PDA Strategic Plan, p. 15.

61 PDA Strategic Plan, p. 15.

Port's overall plan also recognizes that rail realignment will be necessary for full build out of the Georgia Pacific site. The site plan calls for relocation of the BNSF rail track to the east, allowing for passenger and freight trains to move through the area without bisecting the site.[62]

Both the Port and PDA waterfront development plans call for activity that could likely bring long-term construction, investment, and economic opportunity. Over the course of 25-30 years, the number of direct, induced/indirect jobs that would be created could serve as a significant economic opportunity for Bellingham and the region.

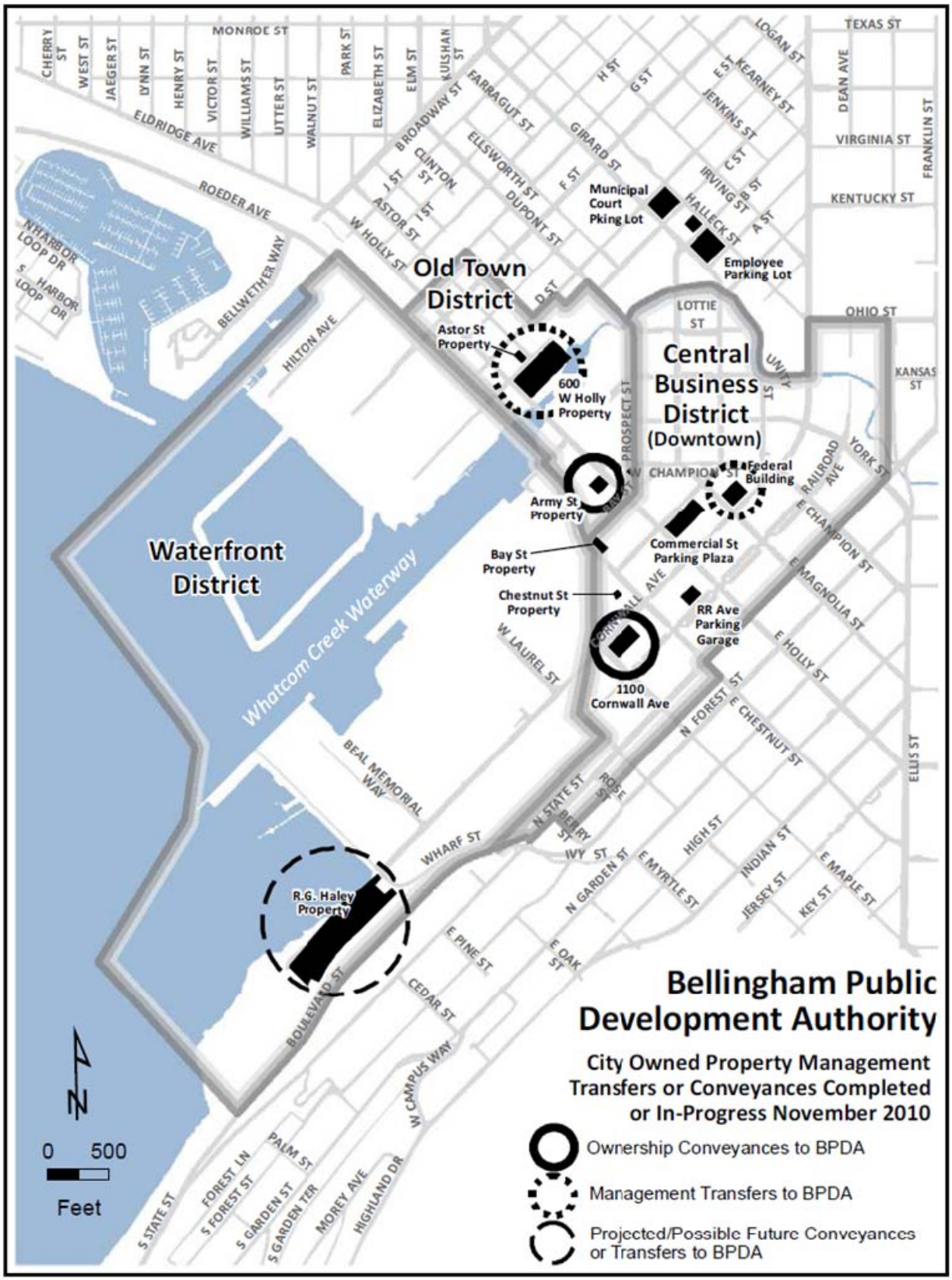
A 2007 analysis by Western Washington University estimated that full build out of the Georgia Pacific site – at a projected investment of $1 billion over 20 to 35 years – would result in between 17,250 and 23,000 job years of employment. The Port of Bellingham EIS for the Georgia Pacific site estimates that at full development, the site could be the home to as many as 7,200 jobs.[63]

To the extent that both the Port of Bellingham and PDA waterfront development projects hinge on access to the waterfront, increased train traffic that reduces access and/or safety (real or perceived) could reduce development potential if current access issues are not addressed. Prospective developers of the waterfront site – or investors – may be discouraged by the fact that there is even a pending proposal to increase rail traffic and further limit access.

62 It is important to note that the FEIS assumes the relocation, but the relocation itself would be subject to a separate permitting and environmental review process that would be undertaken by BNSF and Washington State DOT.

63 As is the case with the development of GPT, some of these jobs – as well as some of the resulting tax and other economic benefits – would go outside of Whatcom County.

Bellingham PDA City Project Map



Impact on Tourism and the Ability to Attract New Residents

In addition to the impact on baseline growth, GPT development and operation could also impose risk by reducing the likelihood of significant growth related to tourism opportunities, as well as the ability to attract new residents and jobs to Bellingham and Whatcom County.

Bellingham and Whatcom County Tourism (Tourism) actively markets the region's natural resources and amenities to attract visitors. According to a recent report commissioned by Tourism, total spending by visitors to the County increased each year since 2000, reaching $460 million in 2008.[64] The report also indicated that "the largest age segment of the primary market will continue to be relatively young people, indicating the importance of attracting families and young, active visitors."[65] Additionally, it suggested that Canadians are likely to continue to represent an important target market – dependent upon exchange rates and border crossing ability.

The study indicated that most visitors to Bellingham and Whatcom County fit the following categories:

- Return visitors
- Relatively high incomes (over 50 percent of all visitors have family incomes of at least $75,000)
- Almost 70 percent of visitors to Bellingham and Whatcom County possess a bachelor's degree or graduate degree

Four out of five visitors to Whatcom County traveled through Bellingham. While in and around Bellingham, visitors found Chuckanut Drive and Boulevard Park among the top attractions. Additionally, the study suggested that activities such as visiting downtown Bellingham (especially among first-time visitors), dining, shopping, hiking, and attending fairs are popular with visitors to the region. The highest rated quality of the County and City by visitors was its physical environment, as well as its parks, scenic areas, and recreational trails.[66]

The report concluded that the ambiance of downtown Bellingham and Fairhaven was a particularly important draw.[67] Similarly, the County's waterfront attractions and attributes, outdoor recreation activities, and natural beauty and environment were critical components of its tourism attraction.

The same attributes that appear to be driving increases in tourism may also be contributing to the attraction of Whatcom County and Bellingham to new residents who are bringing higher levels of education attainment and income. The County has attracted residents who migrate with higher AGIs than those who leave the County: migration between 2004 and 2010 resulted in an aggregate net increase of approximately $172.3 million in AGI. Similarly, the County has a higher number of residents who commute outside of the County and earn higher wages than those who commute into the County (and earn lower wages). Home prices remain high when compared to income, and individuals with higher education attainment levels are locating in Whatcom County despite lower wages and income. The choice of living in the County or City is worth something to individuals and they appear willing to pay for the region's location, lifestyle, and geography.

64 Dean Runyan Associates. Bellingham and Whatcom County Tourism Analysis, p. 14.

65 Runyan Associates, p. 11.

66 Runyan, p. 43.

67 Runyan, p. 53.

Beyond the risk of an impact on baseline growth, GPT's development and operation could have a risk of jeopardizing growth in tourism and in-migration of skilled workers and entrepreneurs because of its effect on the building brand of Whatcom County, particularly Bellingham. Both tourism and the in-migration attraction are based in part on the perception of the area as environmentally conscious. Currently, the region is seen as a green, clean, and socially responsible area. The region's view of itself as socially responsible and environmentally oriented is likely a leading reason why the Bellingham/Whatcom Chamber of Commerce will place an emphasis on the triple bottom line (TBL) with a focus on profit, people (i.e. social responsibility), and planet (environmental responsibility).[68] To the extent that GPT changes current residents' experiences with lifestyle characteristics they value, out-migration (particularly among those in the mobile class of skilled workers and entrepreneurs) could be a risk to the region.

The risk exists, in part, because the principal freight to be transported to GPT is coal. To the extent that the perception of Bellingham and Whatcom County as 'clean and green' wanes, it could put potential gains in tourism and in-migration of skilled workers and entrepreneurs at risk.

Quantifying the Risk

Researchers suggest that "decisions are said to be risky because the outcome following a choice may result in a potential loss, including lost opportunities or sub-optimal outcomes."[69] Intuition and/or ad-hoc decisions where risk is present are unlikely to result in the best outcomes for decision makers; especially where decision makers hold the public trust. As a result, a focus on understanding the decision and its potential impacts – pro and con – is critical to develop a sophisticated understanding of the decision.

While it is possible that none of the risks identified in the prior section will be realized, a plausible case exists that the three scenarios outlined, in fact, pose some level of risk.

We do not attempt to quantify a specific level of risk. Instead, we know that if baseline growth rates are in fact reduced to a certain level as a result of GPT, the effect will be that the economic benefits of development and operation of the terminal will be more than offset by those lost opportunities. In other words, we can determine what level of risk would be sufficient to preclude any net economic benefit to Whatcom County.

Our analysis of risk makes a series of assumptions – each of which is uncertain. First, we assume that GPT will produce the level of economic benefits projected by PIT. Given the difference in projections from Martin Associates and FRMC, it is possible that those projections are too high or too low. Second, we assume that the baseline growth projections established by the state will be achieved. Again, these projections could be too low or too high. Third, we assume that project construction will not begin until 2015. As previously noted, it seems likely that the EIS process will not be concluded prior to 2016. Fourth, we base our analysis solely on the construction and operation of Phase I of the terminal. SSA (PIT) has indicated that they are prepared to proceed with construction of Phase I and Phase II would await additional throughput commitments. At this point, Phase II economic benefits seem more speculative. Finally, for purposes of this analysis, we assume that job years associated with construction will be equally divided over a two year period.

Our analysis examines two time horizons. The first is a 10 year time horizon beginning in 2012. Under this analysis, GPT development would not create any jobs until its fourth year. At the same time, while the proposal was pending, it could have an effect on other potential job

68 From discussions with Ken Oplinger, CEO/President – Bellingham/Whatcom Chamber of Commerce.

69 Martin T. Schultz, Kenneth N. Mitchell, Brian K. Harper, and Todd S. Bridges, "Decision Making Under Uncertainty, US Army Corps of Engineers", Washington, DC, November 2010, p. 1.

growth. The second analysis is a 10 year time horizon that begins in 2015, the assumed year that construction would begin.

Without the development of GPT, by 2021, the current projections indicate that Whatcom County's employment will increase from its 2010 level by 14,969, or 20.4 percent. By comparison, from 2000 to 2010, employment in the County grew by 11,510, or 18.6 percent. Over the next 10 years, total projected GPT related employment will equal 11,509 job years. Over the same period, the County's projected baseline employment gains (absent GPT) are equal to 67,653 job years. By comparison, from 2000-2010 factoring in both recessions, there was an increase of 86,630 jobs years in Whatcom County.[70]

The project team also compared the projected trajectory of Whatcom County's employment and that of GPT from 2015-2024 (assuming construction begins in 2015). In this time frame, without the development of GPT, it is projected that employment will grow in Whatcom County by 13,603, or 15.4 percent. Over the same period, the total projected GPT-related employment would equal 14,110 job years. By 2024, baseline employment gains in Whatcom County would equal 107,597 job years.

Thus, to the extent that development and operation of GPT would reduce baseline employment gains by less than 17 percent (between 2012 and 2021) or less than 13 percent (between 2015 and 2024), it would produce net gains in employment for Whatcom County. If, however, based on the scenarios outlined above – or for other reasons – development and operation of Phase I of GPT would result in the loss of more than 17 percent (between 2012 and 2021) or more than 13 percent (between 2015 and 2024) of baseline growth, it would have a net negative impact on the Whatcom County economy. Said another way, even if all of the PIT assumptions are accepted, there is a possibility that the development of GPT may have a negative net impact on the Whatcom County economy.

70 It is possible to have less job growth and more job years because growth focuses on point in time comparisons, while the job years analysis takes into account higher employment numbers during the period.

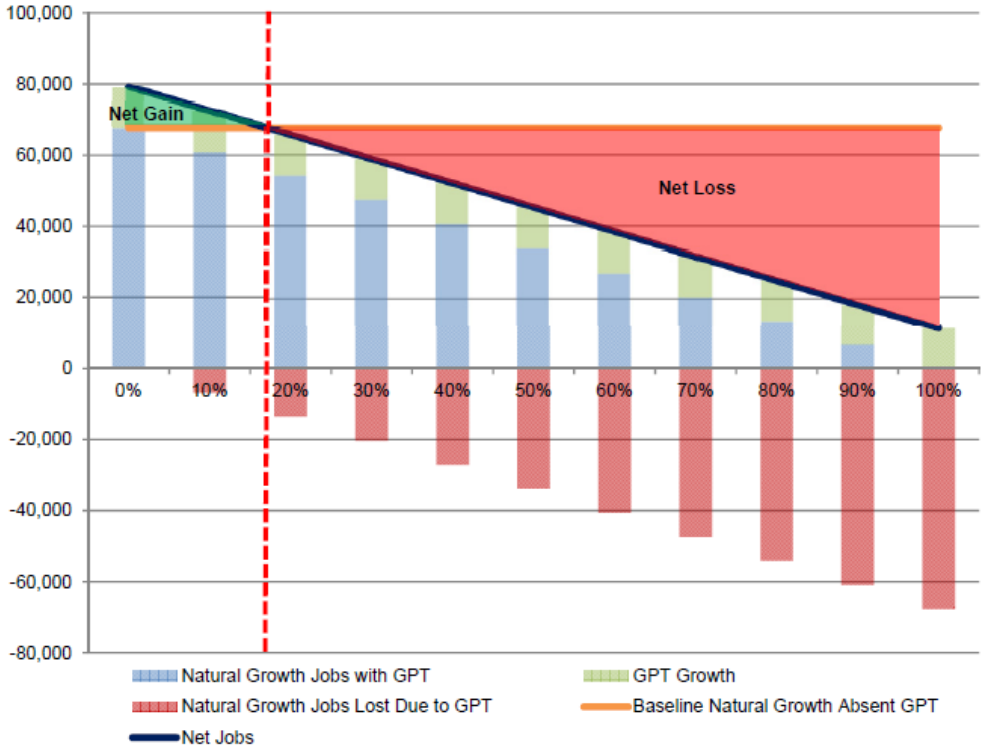
Whatcom County Natural Trajectory Job Years and GPT Projected Job Years (2012-2021)

GPT Jobs Years Created by 2021	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Direct Jobs											
Temporary Construction	0	0	0	1,715	1,715	0	0	0	0	0	**3,430**
Permanent Operations	0	0	0	0	0	294	294	294	294	294	**1,470**
Indirect & Induced Jobs											
Temporary Construction	0	0	0	1,872	1,872	0	0	0	0	0	**3,744**
Permanent Operations	0	0	0	0	0	573	573	573	573	573	**2,865**
Total Direct, Indirect & Induced Jobs											
Temporary Construction	0	0	0	3,587	3,587	0	0	0	0	0	**7,174**
Permanent Operations	0	0	0	0	0	867	867	867	867	867	**4,335**
Grand Total											**11,509**
Job Years Created Absent GPT	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**Total**
Whatcom County	1,135	2,286	3,455	4,721	6,006	7,313	8,640	9,988	11,359	12,750	**67,653**

Whatcom County Natural Trajectory Job Years and GPT Projected Job Years (2015-2024)

GPT Job Years Created by 2024	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Direct Jobs											
Temporary Construction	1,715	1,715	0	0	0	0	0	0	0	0	**3,430**
Permanent Operations	0	0	294	294	294	294	294	294	294	294	**2,352**
Indirect & Induced Jobs											
Temporary Construction	1,872	1,872	0	0	0	0	0	0	0	0	**3,744**
Permanent Operations	0	0	573	573	573	573	573	573	573	573	**4,584**
Total Direct, Indirect & Induced Jobs											
Temporary Construction	3,587	3,587	0	0	0	0	0	0	0	0	**7,174**
Permanent Operations	0	0	867	867	867	867	867	867	867	867	**6,936**
Grand Total											**14,110**
Job Years Created Absent GPT	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Whatcom County	4,721	6,006	7,313	8,640	9,988	11,359	12,750	14,163	15,599	17,058	**107,597**

From 2012-2021, if development of GPT reduces otherwise projected job growth by more than 17%, the project will be a net loss.



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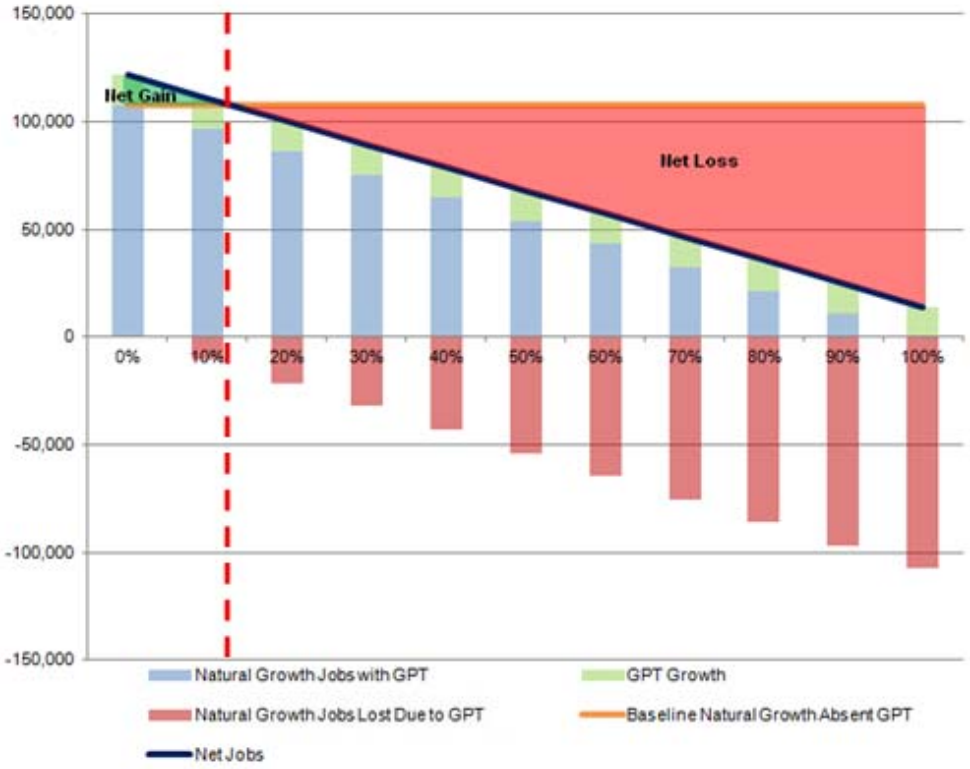


VI. Understanding and Managing the Risk

Some have suggested, that to the extent most of the risk involved with the development of GPT is related to the increased rail traffic to the site, other developments could lead to the same level of risk without the same level of benefits.

The project team heard from several entities that indicated if GPT is not located at Cherry Point, coal could be shipped by rail through Whatcom County to ports in British Columbia. If this occurred, the region would still have the rail traffic, but none of the economic benefits associated with the development and operation of GPT. At this time, there is not sufficient evidence to support the claim that if GPT is not located at Cherry Point, the same magnitude of coal-related train traffic as caused by GPT would occur as a result of coal delivery to ports in British Columbia.[71]

In 2007, approximately 90 percent of Canada's coal exports were shipped through terminals in British Columbia.[72] The main coal export locations in British Columbia are Prince Rupert[73] (Ridley), which accounts for approximately 20 percent of all Canadian exported coal, and Port Metro Vancouver (Neptune and Westshore), which accounts for approximately 80 percent of all Canadian exported coal.[74] Prince Rupert is likely to receive some US coal in future years, adding to its larger Canadian-based demand, to increase annual coal export capacity; though there is some concern from at least one US coal company that shipping coal to Prince Rupert is uneconomic.[75]

Still, expansion of shipments of U.S. coal to Canada will depend upon the capacity of both the ports and rail. Westshore does not currently have plans to expand its physical footprint but has made operational and equipment adjustments to add incremental capacity. According to Washington DOT information and its Marine Cargo Forecast, rail capacity for the BNSF rail line along coastal Whatcom County (and Bellingham) has a capacity for 18 trains per day currently, and 30 trains per day by 2028. Additionally, a factor affecting capacity is that BNSF has performance and on-time agreements with Washington DOT (and Amtrak) to provide passenger rail service on the *Cascade* line.

While there is clearly an increase in demand for coal in Asia – particularly China – any additional cost related to transportation could tip the competitive advantage to other sources. More of China's demand for coal could be met domestically. According to the US Energy Information Administration's (EIA) 2011 International Energy Outlook, China has the ability to meet "substantial portions of their future coal demand with domestic production."[76] According to the EIA, China's domestic production of coal is expected to grow from 70.5 quadrillion Btu to 107.6 quadrillion Btu in 2035. Over the same time frame, US coal production is projected to increase from 22.6 quadrillion Btu to 26.5 quadrillion Btu.

Australia and New Zealand are both expected to become larger exporters of coal, increasing production from 10.1 quadrillion Btus in 2010 to 15.6 quadrillion Btus by 2035. Peabody, which has contracted with SSA for shipment of coal through GPT, has invested heavily in Australia - recently purchasing assets belong to Macarthur Coal for a reported $5.1 billion. Peabody

71 Requests for such information were made to SSA representatives.

72 British Columbia Ministry of Energy, Mines and Petroleum Resources. 2010 Coal Resources in British Columbia: Opportunities, Logistics and Infrastructure, p. 15.

73 Ridley Terminals Inc. is owned by the Canadian government.

74 Canadian Minerals Yearbook -- 2009.

75 Ridley Terminals, Inc. 2010 Annual Report: Building On A Strong Foundation, p. 9. In its 2011 Fourth Quarter and Full Year Highlights, Cloud Peak Energy, Inc. – a large Powder River Basin coal producer indicated that it had no additional shipments planned through Ridley because it was uneconomic.

76 US Energy Information Administration (EIA), 2011 International Energy Outlook, p. 69.

executives recently indicated that Australian mines are expected to supply roughly half of the growth in global coal exports in 2012, driven by demand in China and India.[77]

It is also possible that some U.S. coal could be shipped through ports that would not affect rail traffic in Whatcom County – such as ports on the Gulf of Mexico. For instance, Arch Coal recently signed a deal with Kinder Morgan Energy Partners LP to ship PRB coal from its Gulf ports and is in talks to ship additional coal from Kinder Morgan's east coast ports.[78]

Some of the risks to economic development posed by the development and operation of GPT can be managed. Plans for the redevelopment of the Georgia Pacific site already call for moving the existing BNSF tracks and for a series of projects that would eliminate grade crossings. The Army Street Project, the first step in the proposed redevelopment by PDA, calls for a design that specifically addresses the issue of rail traffic by bridging over existing tracks.

To the extent that noise and access issues are addressed,[79] the risks related to limitation on other economic growth can be reduced. It may not be possible to limit risks related to image or reputation – and their potential impact on tourism and attraction of in-migration among the mobile class of skilled workers and entrepreneurs – resulting from the proximity to GPT.

Risk management, however, comes at a cost. While some might argue that investments related to rail were already planned, the potential of the GPT development would clearly increase the need to act. The question then becomes who would pay and whether local governments and residents should be asked to bear the cost of risk management.

In the absence of risk management, decision makers need to determine how much risk they are willing to tolerate. If our analysis indicated that it would require the loss of 90 percent of projected baseline job growth for the GPT project to produce net negative employment impact, it would be relatively clear that the risk was relatively low. Similarly, if our analysis suggested that a loss of just 1 percent of projected baseline job growth would offset any benefits of GPT, it would be fairly clear that the risk was relatively high.

As noted earlier, different decision makers can look at our findings and reach different, yet valid conclusions. The important thing is that they weigh the risk and understand the need to manage it.

77 Steve James, "Peabody profit misses estimate, sees U.S. coal slump." *Reuters*. January 24, 2012.

78 Jeremy Fugleberg, "Powder River Basin coal to ship from Gulf Coast," Casper Star-Tribune. February 12, 2012.

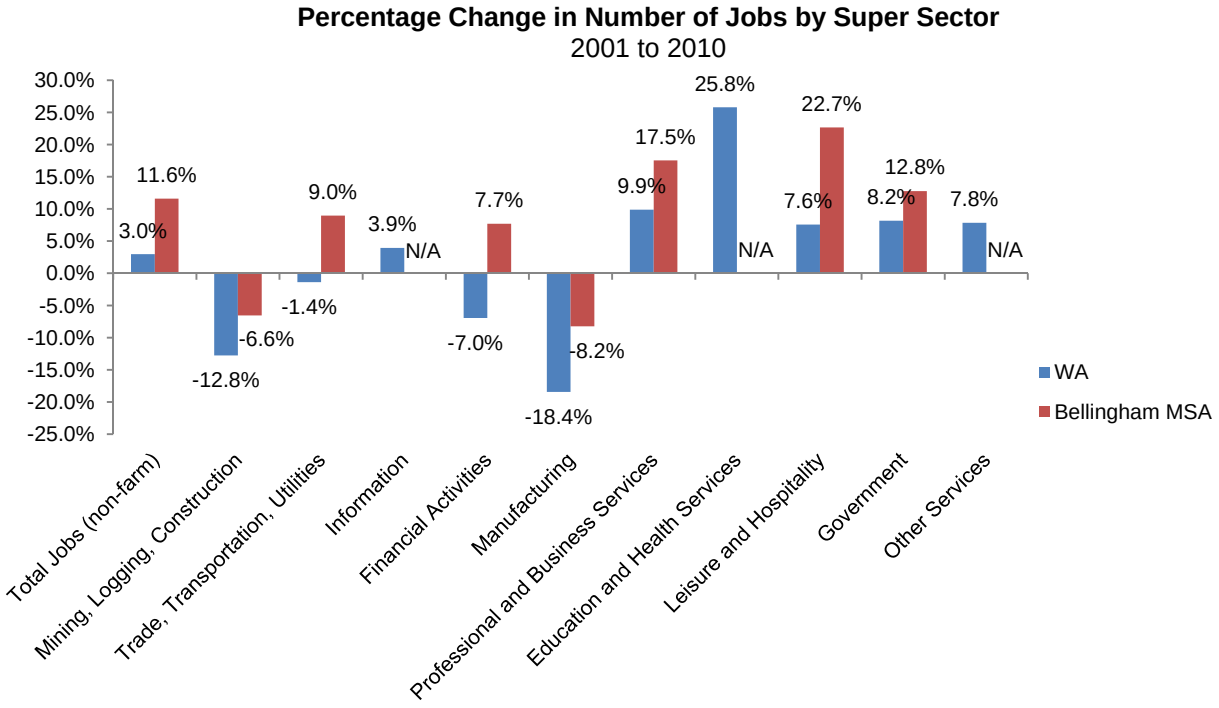
79 It should be noted that some noise problems can be mitigated (i.e. horn noise, crossings, etc.), but vibrations, rail screeches, and other likely occurrences of rail traffic cannot be fully mitigated.

Appendices: Whatcom County and Bellingham Economy

Appendix A: Employment and Unemployment

From 2001 to 2010, the Bellingham MSA's rate of job growth was almost four times the state rate. The Bellingham MSA (Whatcom County) added 8,100 non-farm jobs – an 11.6 percent increase. Statewide, non-farm jobs grew by 3.0 percent.

Compared to the state, the Bellingham MSA grew jobs at a greater percentage or shed jobs at a smaller percentage for every super-sector for which data were available.[80]



Source: BLS CES Data – Not Seasonally Adjusted

The super-sectors with the largest increase in number of jobs in the MSA were:

- Education and Health Services (1,900 jobs)[81]
- Government (1,800 jobs)[82]

80 Those super sectors for which data are available accounted for the growth of 4,800 of the 8,100 jobs from 2001 to 2010. While data from the CES database are not available individually for all super sectors, calculations indicate the missing super sectors accounted for 12,000 jobs in 2001 and 15,300 jobs in 2010. Given the composition of Bellingham and Whatcom County's economy, it could be argued that, of the super sectors that are not available at the Bellingham MSA level (and for the City of Bellingham in particular), education and health services sector was the most likely to be driving the significant increase in jobs during the 2001 to 2010 time period. The most recent BLS Occupational Employment Statistic (OES) data available for the Bellingham MSA estimated there were approximately 73,420 jobs in the Bellingham MSA. OES defined jobs of these types accounted for 14.8 percent of the MSA's total jobs. Applying that percentage to the total estimated number of jobs in 2010, yields 11,550 jobs, or 75.5 percent of the total jobs not included in a defined super sector. From 2001 to 2010, healthcare practitioner and technical operations occupations grew by 30.5 percent and healthcare support occupations grew by 52.6 percent. If applied to the CES data, it could be estimated that the health and education sector was responsible for job growth in the range of 1,900 jobs. While combining/comparing OES data and CES data is not a perfect or even ideal method for a variety of important reasons, the process suggests there is likely support to suggest that the education and healthcare sector (particularly healthcare) was an important driver of job growth in the Bellingham MSA over the last decade.

81 Estimated – see previous analysis. Education includes jobs in private higher education institutions. Government (specifically state government) includes jobs in public higher education institutions (i.e. WWU).

- Leisure and Hospitality (1,700 jobs)
- Trade, Transportation, Utilities (1,200 jobs).

Collectively, from 2001 to 2010, the four super-sectors above accounted for 81.5 percent of the total job growth in the Bellingham MSA. The education and health services super-sector grew at an estimated 20.5 percent from 2001 to 2010.

By comparison, the super-sectors with the largest increase in number of jobs at the state level were:

- Education and Health Services (76,900 jobs)
- Government (41,300 jobs)
- Professional and Business Services (29,300 jobs)
- Leisure and Hospitality (18,700 jobs).

The project team met with several individuals and groups that suggested public sector growth was responsible for the majority of the increase in jobs in Whatcom County. The data suggest that while local government in the MSA added a greater percentage of jobs than the state average for local government, the likely increase in education and health services, leisure and hospitality produced more total jobs than the growth in government. Similarly, job growth in the Bellingham MSA exceeded statewide growth across all super sectors. Even where it lost jobs, the Bellingham MSA losses were at a lower rate than statewide.

For example, Bellingham's role as the regional retail center for the MSA was likely a significant driver behind the MSA's retail trade job growth of 9.0 percent from 2001 to 2010 – significantly greater than the Statewide experience in which jobs declined by 1.3 percent over the same time period.

Given the overall trend for the Bellingham MSA as compared to the State, government employment contributed to the growth, but was among many drivers – and not the sole driver – to affect job increases in the region. Even if there had been no increase in government jobs from 2001 to 2010, the Bellingham MSA would have still added jobs and added them at a rate approaching three-times greater than the rate of statewide job growth.

82 The project team received information that suggested the 600 job increase in Federal government jobs was primarily due to increased border security post September 11, 2001.

Job Changes by Super Sector
2001 to 2010

Sector	WA			Bellingham MSA	
	Jobs +/-	Jobs % Chg		Jobs +/-	Jobs % Chg
Total Jobs (non-farm)	**80,400**	**3.0%**		**8,100**	**11.6%**
Mining, Logging, Construction	**(21,500)**	**-12.8%**		**(400)**	**-6.6%**
Mining and Logging	*(3,900)*	*-39.8%*			
Construction	*(17,600)*	*-11.1%*			
Trade, Transportation, Utilities	**(7,200)**	**-1.4%**		**1,200**	**9.0%**
Wholesale Trade	*1,200*	*1.0%*			
Retail Trade	*(4,200)*	*-1.3%*		*800*	*8.9%*
Transportation and Utilities	*(4,100)*	*-4.4%*			
Information	**3,900**	**3.9%**			
Financial Activities	**(10,100)**	**-7.0%**		**200**	**7.7%**
Finance and Insurance	*(8,400)*	*-8.6%*			
Real Estate and Rental and Leasing	*(1,600)*	*-3.4%*			
Manufacturing	**(58,300)**	**-18.4%**		**(700)**	**-8.2%**
Professional and Business Services	**29,300**	**9.9%**		**1,000**	**17.5%**
Professional, Scientific, and Technical Services	*18,800*	*13.2%*			
Management of Companies and Enterprises	*1,900*	*6.4%*			
Administrative and Support and Waste Mgmt and Remediation Services	*8,500*	*6.8%*			
Education and Health Services	**76,900**	**25.8%**			
Educational Services	*9,200*	*23.1%*			
Health Care and Social Assistance	*67,500*	*26.1%*			
Leisure and Hospitality	**18,700**	**7.6%**		**1,700**	**22.7%**
Arts, Entertainment, and Recreation	*4,300*	*10.6%*			
Accommodation and Food Services	*14,300*	*6.9%*			
Government	**41,300**	**8.2%**		**1,800**	**12.8%**
Federal Government	*7,600*	*11.2%*		*600*	*66.7%*
State Government	*4,500*	*3.1%*		*(200)*	*-3.8%*
Local Government	*29,200*	*9.9%*		*1,300*	*16.0%*
Other Services	**7,600**	**7.8%**			

Note: totals may not sum due to rounding

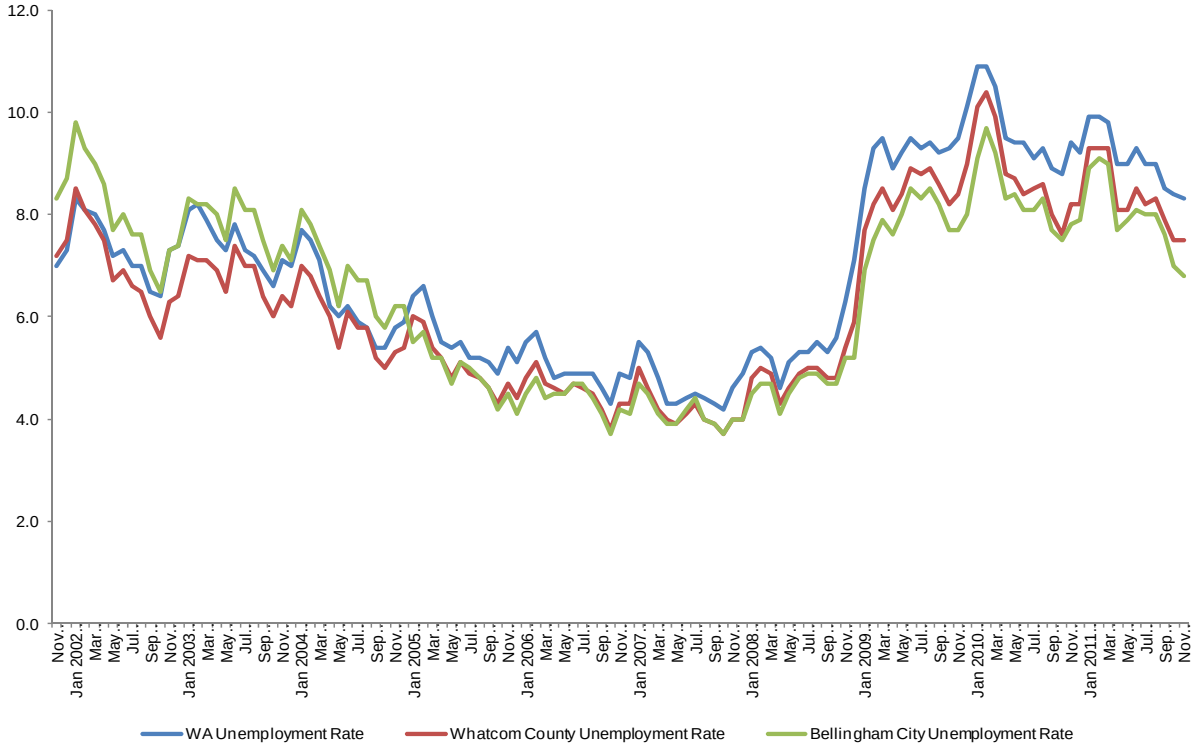
Source: BLS - Current Employment Statistics - Not Seasonally Adjusted

Unemployment

As the graph below shows, since 2005, Bellingham's unemployment rate has been nearly equal or slightly less than Whatcom County's unemployment rate and consistently below the State's unemployment rate.[83]

83 US Bureau of Labor Statistics – Local Area Unemployment Statistics (LAUS), November 2001 – November 2011, Not seasonally adjusted data.

Unemployment Rate (Not Seasonally Adjusted)
November 2001 – November 2011



Appendix B: Population Growth

From 2000 to 2010, Bellingham and Whatcom County both grew in population by slightly more than 20 percent; greater than the State's growth rate of just over 14 percent.[84] The US Census Bureau reported Bellingham's 2010 population as 80,885, an increase of 13,714 individuals from the 2000 Census.[85] Whatcom County's 2010 population of 201,140 represented an increase of 34,326 from the 2000 Census.

Much of the population growth in both Bellingham and Whatcom County was attributable to increases in the number of residents between the ages of 20-39 and those between the ages of 50-69. These two age groups accounted for 84.0 percent of all population growth in Bellingham and 78.1 percent of all population growth in Whatcom County – statewide, these two age groups accounted for 86.9 percent of the State's net population growth.

Examining the data by 10-year age bands shows that there were several notable differences in the population changes experienced by Bellingham, Whatcom County, and Washington. For example, the number of residents between the ages 30 and 39 declined statewide by 2.1 percent and in the parts of Whatcom County outside of Bellingham by 0.3 percent: in Bellingham, the number of residents between 30 and 39 increased by 13.5 percent. While the number of 60-69 year old residents increased statewide by more than two-thirds, population in that age range nearly doubled in Bellingham and grew by more than 90 percent in the non-Bellingham parts of Whatcom County.

84 US Census Bureau 2000 and 2010 Decennial Census Data. Bellingham's population grew by 20.4 percent, Whatcom County's population grew by 20.6 percent, and Washington's population grew by 14.1 percent.

85 According to Bellingham's Planning & Community Development Department, annexations that occurred in Bellingham between 2000 and 2010 accounted for a population increase of 1,216 residents.

Population Change from 2000 to 2010

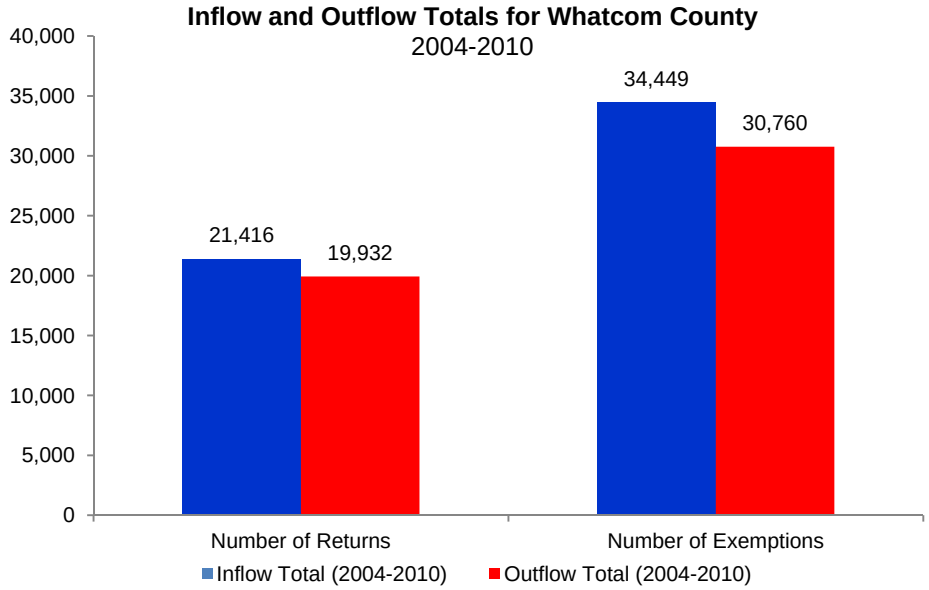
Total Population	WA 2010 vs 2000 (#)	WA 2010 vs 2000 (%)	Whatcom County 2010 vs 2000 (#)	Whatcom County 2010 vs 2000 (%)	Bellingham 2010 vs 2000 (#)	Bellingham 2010 vs 2000 (%)	Non-Bellingham 2010 vs 2000 (#)	Non-Bellingham 2010 vs 2000 (%)
Total Population	**830,419**	**14.1%**	**34,326**	**20.6%**	**13,714**	**20.4%**	**20,612**	**20.7%**
Total Population Under Age 10	49,319	6.0%	1,080	5.0%	482	7.2%	598	4.0%
Total Population Age 10-19	37,557	4.4%	2,311	9.0%	993	10.4%	1,318	8.2%
Total Population Age 20-29	148,073	18.7%	6,849	25.0%	4,256	25.1%	2,593	24.7%
Total Population Age 30-39	(19,438)	-2.1%	1,092	4.8%	1,133	13.5%	(41)	-0.3%
Total Population Age 40-49	7,247	0.8%	544	2.1%	(119)	-1.4%	663	4.0%
Total Population Age 50-59	271,120	40.0%	8,653	45.6%	2,548	38.6%	6,105	49.3%
Total Population Age 60-69	265,261	68.5%	10,212	93.8%	3,585	99.5%	6,627	91.0%
Total Population Age 70-79	25,165	8.3%	1,518	17.0%	67	1.8%	1,451	27.6%
Total Population Age 80 and Over	46,115	25.3%	2,067	38.7%	769	26.1%	1,298	54.1%
					0			
Population Age 60 and Over	336,541	38.5%	13,797	54.8%	4,421	43.2%	9,376	62.8%
Population Age 65 and Over	165,529	25.0%	7,240	37.3%	2,027	24.3%	5,213	47.2%
Population Age 70 and Over	71,280	14.7%	3,585	25.1%	836	12.6%	2,749	35.9%
Population Age 75 and Over	45,475	14.0%	2,405	25.1%	631	13.1%	1,774	37.4%

Working Age (25-64) Population Change from 2000 to 2010

Working Age Population	WA 2010 vs 2000 (#)	WA 2010 vs 2000 (%)	Whatcom County 2010 vs 2000 (#)	Whatcom County 2010 vs 2000 (%)	Bellingham 2010 vs 2000 (#)	Bellingham 2010 vs 2000 (%)	Non-Bellingham 2010 vs 2000 (#)	Non-Bellingham 2010 vs 2000 (%)
Total Population 25-64	506,687	16.0%	20,194	24.2%	7,880	25.5%	12,314	23.5%
Total Population Age 25-29	76,746	19.0%	3,348	31.4%	1,924	36.0%	1,424	26.7%
Total Population Age 30-34	15,905	3.6%	1,392	12.9%	853	20.0%	539	8.3%
Total Population Age 35-44	(66,782)	-6.8%	(423)	-1.7%	435	5.3%	(858)	-5.3%
Total Population Age 45-54	142,233	16.8%	3,311	13.8%	75	0.9%	3,236	21.1%
Total Population Age 55-59	167,573	58.7%	6,009	76.9%	2,199	85.1%	3,810	72.8%
Total Population Age 60-61	72,128	79.9%	2,783	114.9%	1,074	137.5%	1,709	104.1%
Total Population Age 62-64	98,884	81.9%	3,774	112.4%	1,320	120.0%	2,454	108.7%

Population Growth – Migration

IRS migration data for tax years 2004 through 2010 suggest the important role that migration played in the County's population growth.[86] The data show that Whatcom County experienced a greater amount of population inflow than population outflow during the years reviewed. The chart below displays the total number of income tax returns and the associated number of exemptions for those moving to and moving from Whatcom County.



The large majority of inflow to Whatcom County (68.7 percent) was from other Washington counties. Specifically, based upon the number of returns, King County (4,092 returns), Snohomish County (2,377 returns), and Skagit County (2,340 returns) accounted for 41.1 percent of all inflow, and 59.9 percent of all intra-state inflow, to Whatcom County from 2004-2010.

The remaining 31.3 percent of inflow was attributable to migration from 19 states and other countries. Former Californians represented 12.6 percent of total migration to Whatcom County (2,694 returns) and 40.2 percent of inflow from states excluding Washington. Within California, Los Angeles County (537 returns), San Diego County (435 returns), and Orange County (291 returns) represented 46.9 percent of all inflow from the State. Oregon was the next most popular previous state of residence for new Whatcom residents with 801 former citizens migrating to the County. Multnomah County (281 returns), Lane County (148 returns), and Washington County (134 returns) comprised the majority of the inflow from Oregon. Residents abroad/those moving from other countries (736 returns) and former Arizona residents (571 returns accounted for the next two most popular location of residence prior to moving to Whatcom County.[87]

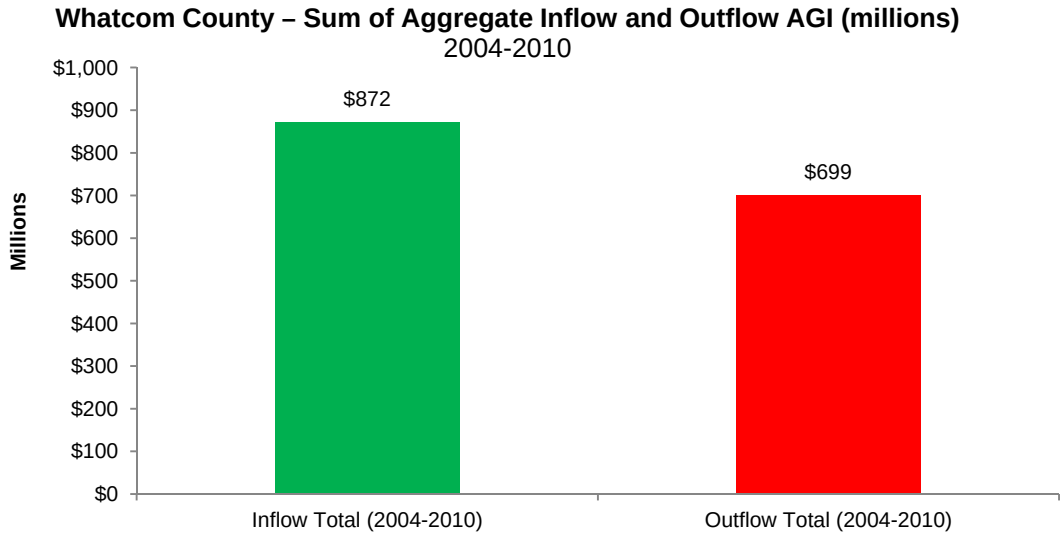
86 Bellingham and Whatcom County each experienced significant population growth from 2000 to 2010. The project team explored Internal Revenue Service (IRS) migration data to obtain a greater understanding of the previous location of newcomers to Whatcom County. IRS migration data is available on a County-to-County level and is based upon year-to-year address changes reported on individual income tax returns filed with the IRS. The data track inflows and outflows and where residents went.

The IRS defines inflows as "the number of new residents who move to a county or state…" Outflows are defined as "the number of residents leaving a county or state…" The IRS data report both the location of origin and the new location. The IRS notes that the data represent between 95 and 98 percent of total annual filings (those filed prior to late September of each calendar year).

87 172 returns listed AFO/AFP addresses as previous locations and are included within the 'foreign' category.

Whatcom County outflow destinations were similar to its inflow patterns. From 2004-2010, the great majority (72.8 percent) of all outflow was to other Washington counties. Similar to inflow data, King County (4,820), Snohomish County (2,316), and Skagit County (2,275) had the most returns associated with outflow data and accounted for 64.8 percent of all outflow to other Washington counties and 47.2 percent of all outflow from Whatcom County.

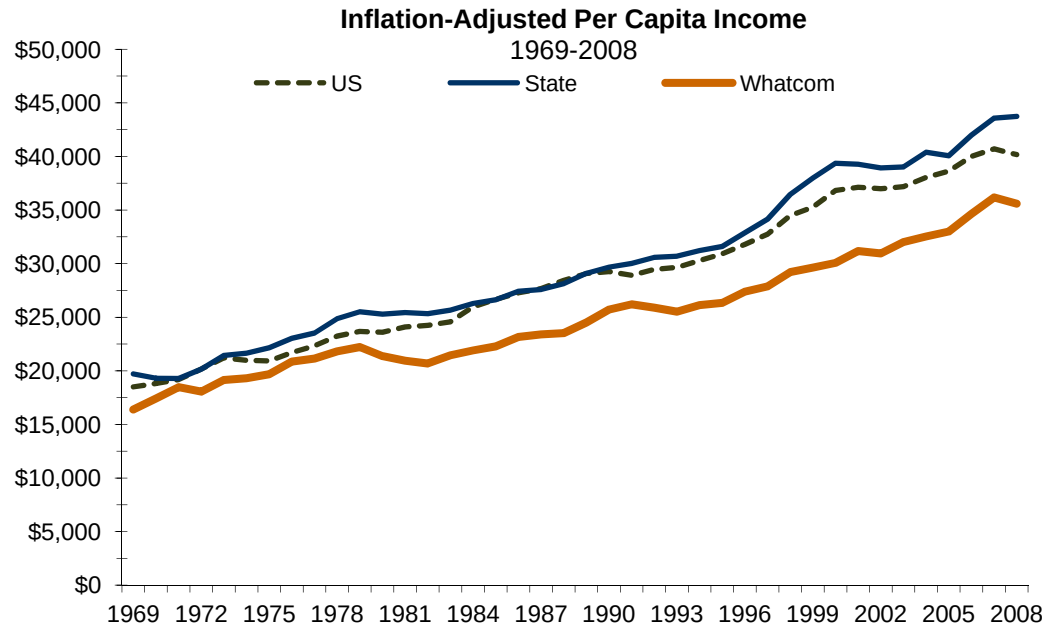
The IRS data also provide a summation of AGI from each of the jurisdictions from/to which people migrated. The chart below shows that, on the whole, Whatcom County realized a net aggregate growth of over $172.3 million in AGI from migration between 2004 and 2010.



Appendix C: Income and Wages

Washington's Office of Financial Management (OFM) data indicate that Whatcom County's inflation adjusted per capita income has consistently been below both the State and US averages since 1969; the graph below shows this trend.[88] Analysis by the Washington Regional Economic Analysis Project (WA REAP), which used data published by the US Bureau of Economic Analysis (BEA), demonstrates that Whatcom County's per capita income has maintained its relative position below the State per capita income through 2009.[89]

Between 2000 and 2008, Whatcom County's per capita income grew at a compound annual growth rate (CAGR) of nearly double that of the nation and significantly greater than the State. Whatcom County's CAGR was 2.1%; US CAGR was 1.1%, and Washington's CAGR was 1.3%.



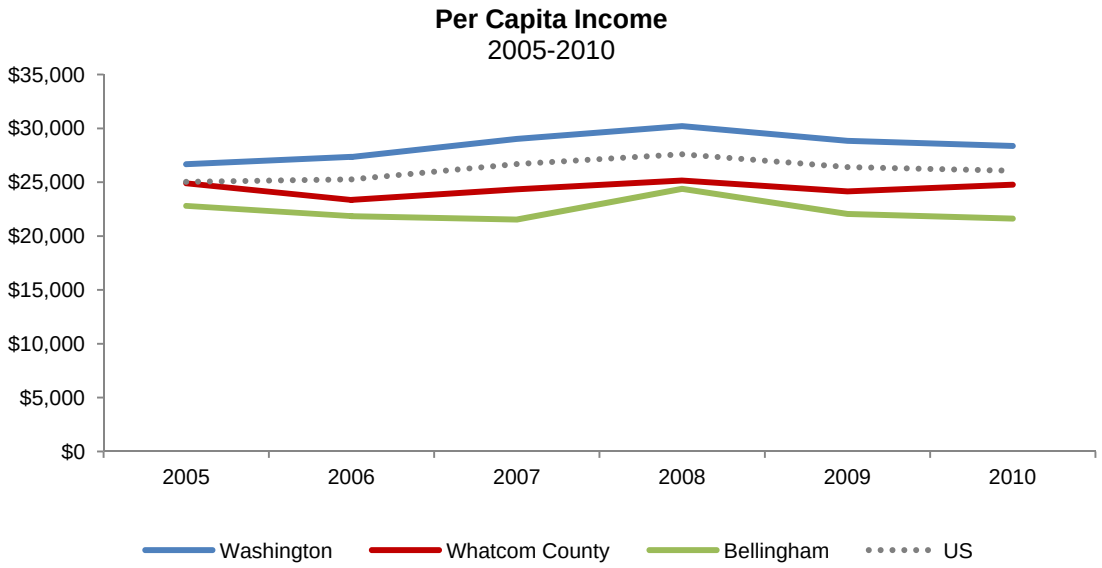
Source: WA Office of Financial Management (OFM)

Just as Whatcom County has consistently lagged the State and the national per capita income, Bellingham's per capita income has consistently lagged the per capita income of Whatcom County (and naturally the State and the nation). As of 2010, Bellingham's per capita income ($23,308) was 8.3 percent less than Whatcom County's per capita income ($25,429), 13.5 percent below US per capita income ($26,942), and 20.8 percent below the State's per capita income ($29,420).[90] Per capita income is sensitive to special populations (i.e. students, inmates, etc.) that can result in lower estimates than are experienced by the rest of the population.

88 OFM data are presented through 2007. Since 2008, Whatcom County has remained below both State and US per capita income levels according to the US Census Bureau's ACS 1-year Estimates in 2008, 2009, and 2010 and 2010 ACS 3-year Estimates data.

89 WA REAP data is available at: http://washington.reaproject.org.

90 US Census Bureau 2010 ACS 3-year Estimates data.



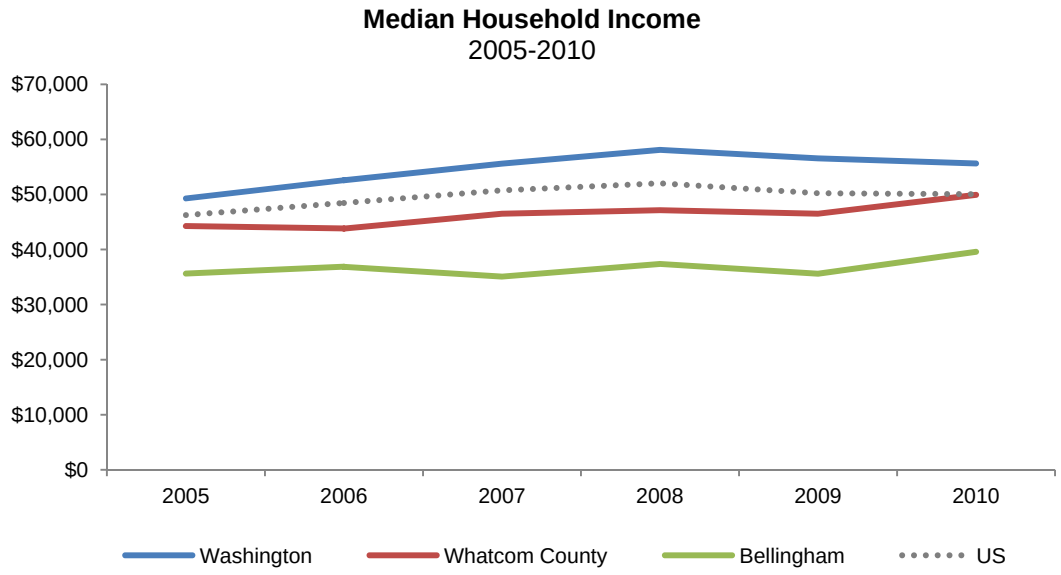
Source: US Census Bureau ACS 1-year Estimates – 2005 through 2010

Income may also be viewed at the household level.[91] Similar to per capita income, median household income can be sensitive to student-aged populations as several or many students residing in a household could lower the median household income below the experiences of the rest of the population. However, it provides a useful measure to assess the relative levels of incomes across jurisdictions.

The US Census Bureau's ACS 1-year data for 2010 indicated that Bellingham's median household income ($39,599) was less than that of Whatcom County, Washington, and the nation.[92] In 2010, Whatcom County's median household income of $49,938 was 3.3 percent above the US average ($50,046) and 7.7 percent below the State median household income ($55,631).

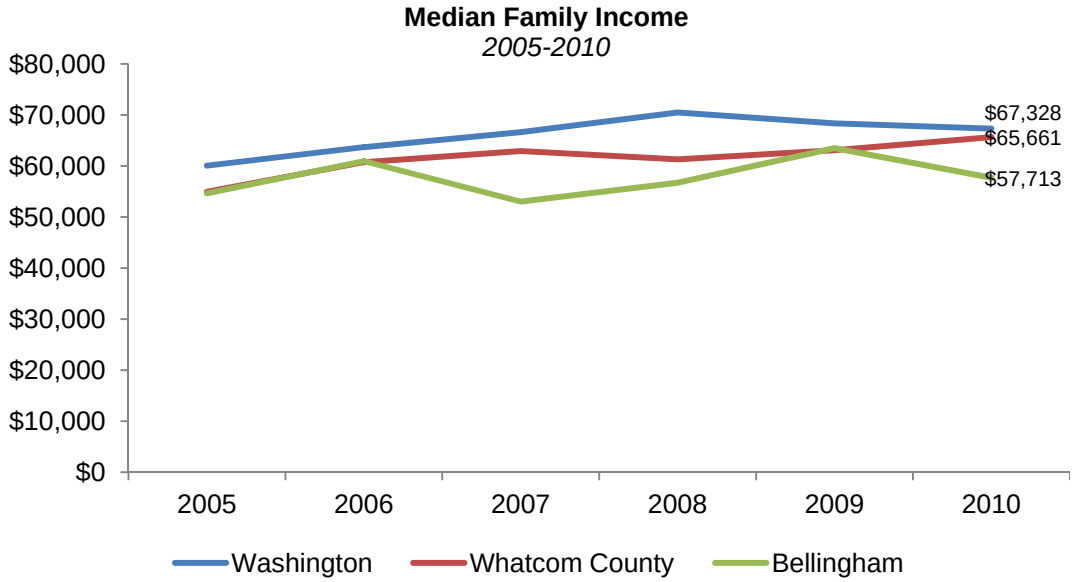
91 The US Census Bureau defines household income as including income of the householder and all other people 15 years and older in the household, whether or not they are related to the householder.

92 The project team endeavored to use US Census Bureau ACS 3-year Estimates data for the graphs on pages 23 through 25, but due to data issues experienced by the US Census Bureau, used ACS 1-year Estimates data for the charts on the aforementioned pages. The data are slightly different, but the patterns and relative rankings of the jurisdictions are largely unchanged. The primary objective of these graphs is to show relative relationships between jurisdictions and that is maintained by using the ACS 1-year Estimates data.



Source: US Census Bureau ACS 1-year Estimates – 2005 through 2010

Median family income data are less affected by student population data.[93] In four of the last six years, Bellingham's median family income was below that of Whatcom County, Washington, and the US. However, in 2006 and 2009, Bellingham's median family income was greater than both Whatcom County and the US average. Whatcom County's median family income was above the US average in four of the six years reviewed (2006-2007, 2009-2010), though it remained below the Washington state median household income in all six years.



Source: US Census Bureau ACS 1-year Estimates – 2005 through 2010

93 The US Census Bureau defines family household as a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family. A family household may contain people not related to the householder, but those people are not included as part of the householder's family in tabulations.

Wages

Overall, Whatcom County's average annual wage was below the State's average wage.[94] Similarly, in 18 of the 20 sectors reviewed, Whatcom County's average annual wage was below the State's average annual wage for the respective sector. In the two instances where Whatcom County had a higher average annual wage, both were less than 4.0 percent greater than the State average. In all 18 sectors where the County lagged the State average annual wage, all lagged the State average by more than 4.0 percent.

Growth industries in the Whatcom/Bellingham region that were discussed earlier in this report included leisure and hospitality (accommodation and food services; arts, entertainment, and recreation), health care and social assistance, government, and retail trade. Among these growth sectors, all had an annual average wage in Whatcom County below their peers in similar sectors in the State.

94 Washington's OFM and the State's Employment Security Department (ESD) collaborate to compile median and hourly wage information for each County. Similar, but different, data are available from the BEA and WA REAP. While methodologies may vary slightly causing different results, both data sets provide quality data that are useful in reviewing income and wages. For the remainder of the income – wages discussion, the project team will use data from Washington's ESD (in partnership with the BLS). Neither State nor BEA data for the full year 2011 are available as of January 10, 2012.

Whatcom County's Variance from State – 2010 Jobs and Wages by Occupation[95]

Sector	Whatcom County Percent of Total Jobs	WA Average Annual Wage	Whatcom County Average Annual Wage	2010 Difference in Average Annual Wage ($)	2010 Difference in Average Annual Wage (%)
All Industries	**100.0%**	**$48,521**	**$37,312**	**($11,209)**	**-23.1%**
Ag., forestry, fishing & hunting	3.9%	$24,034	$24,977	$943	3.9%
Mining	0.2%	$55,654	$51,050	($4,604)	-8.3%
Utilities	0.2%	$77,591	$73,842	($3,749)	-4.8%
Construction	6.2%	$51,127	$51,891	$764	1.5%
Manufacturing	9.8%	$64,925	$53,740	($11,185)	-17.2%
Wholesale trade	3.4%	$63,348	$47,072	($16,276)	-25.7%
Retail trade	12.5%	$30,021	$25,136	($4,885)	-16.3%
Transportation & warehousing	2.4%	$47,743	$37,127	($10,616)	-22.2%
Information	1.9%	$109,777	$42,615	($67,162)	-61.2%
Finance & insurance	2.4%	$70,137	$53,210	($16,927)	-24.1%
Real estate & rental & leasing	1.1%	$38,359	$27,494	($10,865)	-28.3%
Professional & technical services	3.8%	$75,376	$55,156	($20,220)	-26.8%
Mgmt. of companies & enterprises	0.6%	$95,731	$58,393	($37,338)	-39.0%
Administrative & waste services	3.8%	$41,466	$30,903	($10,563)	-25.5%
Educational services	0.9%	$35,158	$21,141	($14,017)	-39.9%
Health care & social assistance	12.4%	$44,673	$37,532	($7,141)	-16.0%
Arts, entertainment, & recreation	2.0%	$25,121	$16,078	($9,043)	-36.0%
Accommodation & food services	9.6%	$17,632	$14,482	($3,150)	-17.9%
Other services, ex. public admin.	4.4%	$24,227	$22,808	($1,419)	-5.9%
Government	18.4%	$51,394	$45,430	($5,964)	-11.6%

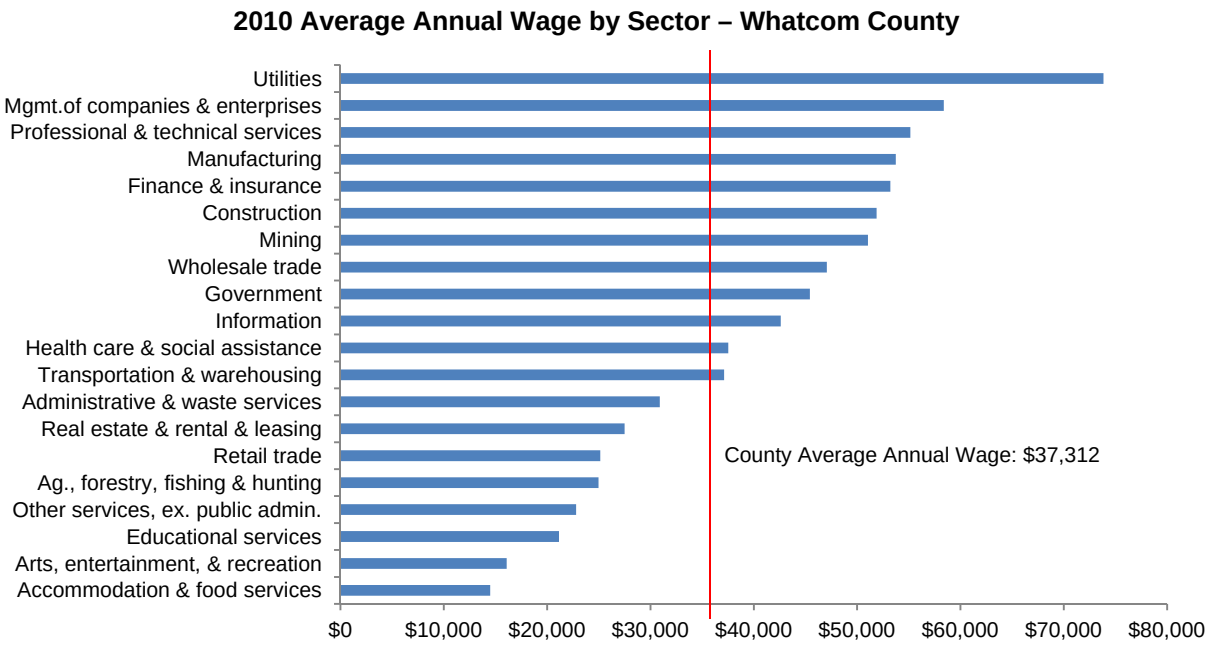
Source: WA ESD – Covered Employment Classified By Industry – Annual Averages 2010 (Revised)

One of the super-sectors that added the most jobs in Whatcom County since 2001 was leisure and hospitality (accommodation & food services and arts, entertainment & recreation sectors); which is also the sector with the lowest annual wage in Whatcom County. Similarly, the retail trade sector and education and health services sectors both experienced growth in Whatcom County and were comprised of industries that have average annual wages at or below the County's average annual wage. The only significant growth sectors in the County with wages above the County's average annual wage were Finance and Insurance and Government.

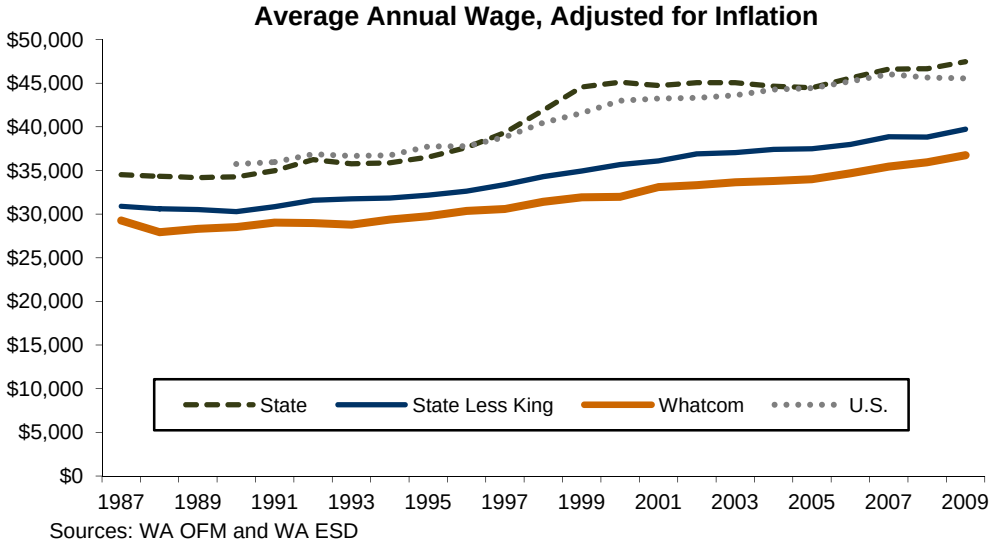
Taken together, this suggests that while the County added many good paying jobs relative to the annual average wage, it also added a significant number of jobs that provide annual wages at or below the County average.[96]

95 Washington ESD.

96 Additional information is available from the WA ESD. In July 2011, ESD published a 2011 Occupational Employment and Wage Estimates Guide that provides estimated employment, average wage and percentiles of wages for a multitude of professions. The data are presented for MSAs, regions, and Statewide. While a profession by profession comparison is beyond the scope of this report, a cursory review of the data seems to support the trend of Whatcom County (Bellingham MSA) having lower average wages than Statewide averages. The ESD publication is available at: Hhttps://fortress.wa.gov/esd/employmentdata/docs/occupational-reports/occupational-employment-wage-estimates-2011.pdfH.



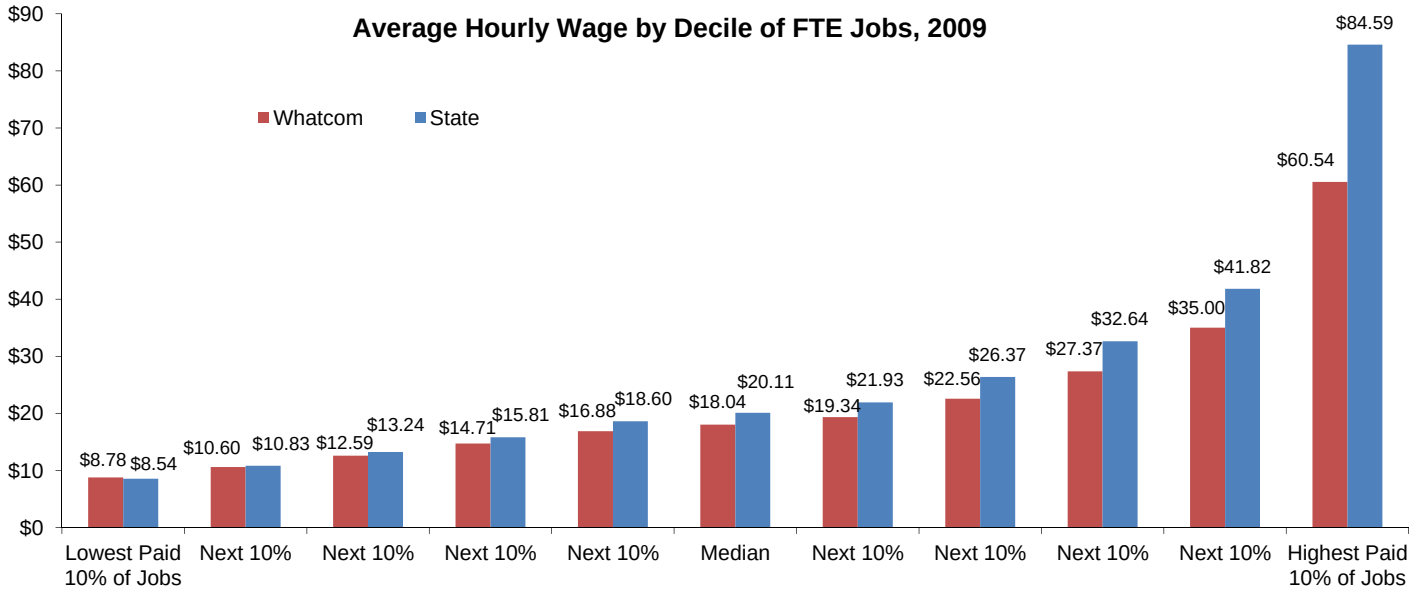
According to OFM and ESD data, the average earnings per job in Whatcom County have consistently lagged the Washington average since 1987 when the data set began; Whatcom County also remained below the State and US average earnings per job, while Washington has been largely been near or above the national average.



Sources: WA OFM and WA ESD

Whatcom County's average hourly wages were closer to the State's average hourly wages among those on the lower-end of the wage scale.[97] As hourly wages increased, the County's lag significantly increased. In other words, the proverbial wage-floor to wage-ceiling was more compressed in Whatcom County than for the State.

97 The wage scale shown is for hourly wages by decile. This range begins with the lowest-paid 10 percent of jobs and increases by 10 percent intervals up to the highest paid 10 percent of jobs (based upon average hourly wage).

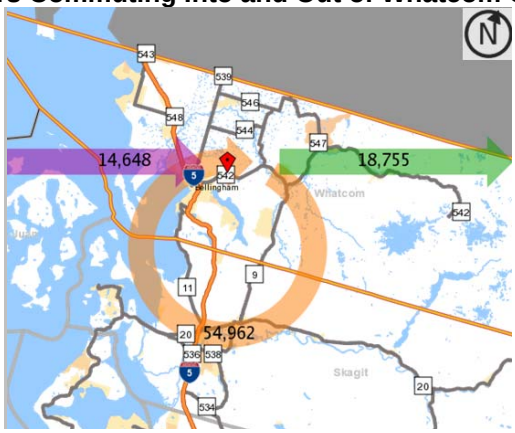


Wage data is based on location of employment. OFM and ESD historical data showed an important distinction that wages earned in Whatcom County are not equal to wages earned by Whatcom County residents. The data showed that the inflow of earnings from cross-county commuters was consistently greater than the outflow of earnings from cross-county commuters. This suggests that workers who resided in Whatcom County and commuted outside of the County for work earned higher wages than those who resided in other counties and commuted into Whatcom County.[98] Similarly, US Census OntheMap application data also showed that more Whatcom County residents commuted outside of the County for work than non-Whatcom residents who commuted into the County for work. In 2009, the difference was estimated to be 4,107 individuals; as shown in the below graphic.[99] Importantly, according to this data, 40.1 percent of those leaving Whatcom County earned more than $3,333 per month as compared with 32.8 percent of those who commuted into Whatcom County, and 34.6 percent of Whatcom residents who lived and worked in the County.

98 WA OFM and ESD personal income data.

99 It is possible that data from OnTheMap understates the effect of Whatcom residents who commute outside the County for work due to the Canadian border affecting its estimates.

Workers Commuting Into and Out of Whatcom County

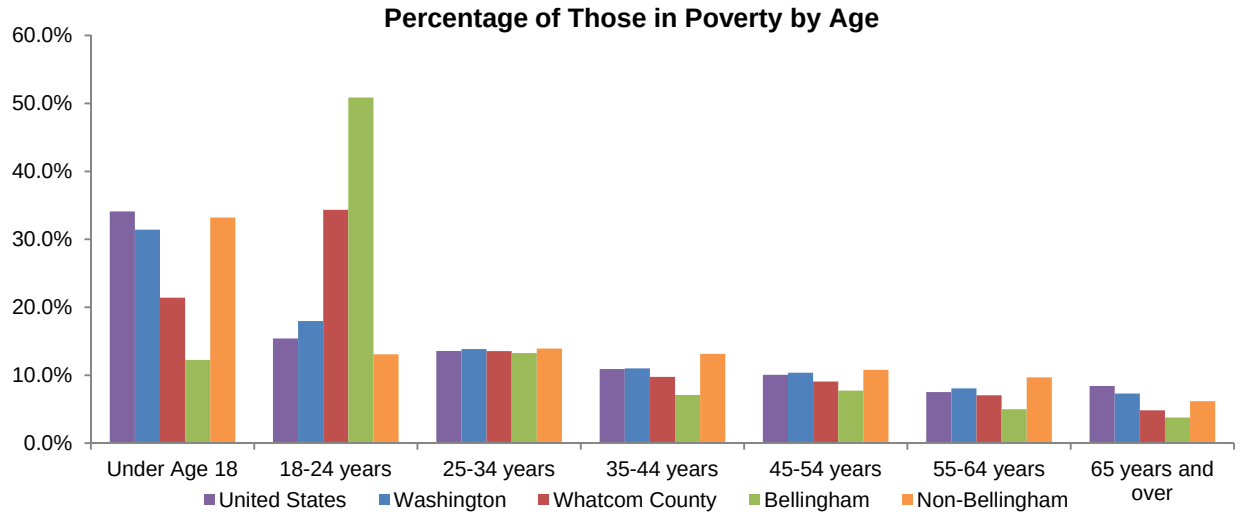


Further evidence that Whatcom County's labor market pays a lower wage in comparison to other regions is found in the County's trend of trailing the State average in wages for those with a Bachelor's degree or higher. Specifically, those with a Bachelor's degree or higher earned an average of $1,706 less per month than the State average for those with a Bachelor's degree or higher; equating to over $20,000 less per year.[100] This result suggests that in addition to being a lower-wage region than the State average – as mentioned previously – Whatcom County and Bellingham may have instances of underemployment among residents. Underemployment is discussed at greater length below.

100 US Census Bureau Quarterly Workforce Indicators (QWI) – 2010 Quarters 1-4.

Appendix D: Underemployment and Poverty

Bellingham's poverty rate of 21.0 percent was greater than the poverty rates for both Whatcom County (14.6 percent) and Washington (12.5 percent).[101] Bellingham accounted for 56.2 percent of Whatcom County's total population in poverty and 68.6 percent of those in poverty between the ages of 18-64. As shown in the chart below, much of Bellingham and Whatcom County's poverty was concentrated among those between the ages 18-24.[102] The City's poverty rate was likely impacted by the significant post-secondary student population in Bellingham; many of whom lived below the poverty line. Bellingham residents ages 18-24 with incomes below the poverty line accounted for 50.9 percent of the City's total and 83.3 percent of all age 18-24 County residents living in poverty.



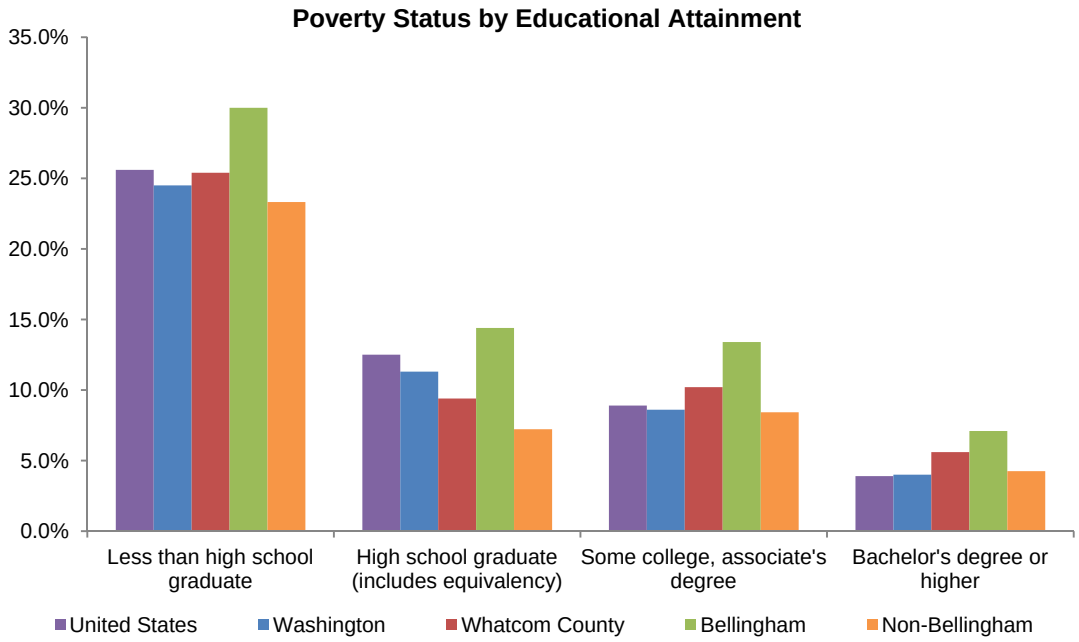
Source: US Census Bureau 2010 ACS 3-year Estimates

Across all educational attainment levels, Bellingham's poverty rate was greater than the remainder of the County, State, and national rates. Almost one-quarter (22.4 percent) of Bellingham residents age 25 and over who live in poverty possessed a Bachelor's degree or greater.[103] This percentage was significantly more than that seen in both the remainder of Whatcom County (13.4 percent) and Washington (13.3 percent) for the same population. The remainder of Whatcom County's poverty rate is generally below or on par with that of the State. The relative high level of poverty experienced by those in Bellingham with high educational attainment suggests there is some level of choice or desire to reside in Bellingham as opposed to other locations.

101 US Census Bureau 2010 ACS 3-year Estimates.

102 US Census Bureau 2010 ACS 3-year Estimates.

103 Source: US Census Bureau 2010 ACS 3-year Estimates.



Source: US Census Bureau 2010 ACS 3-year Estimates

Appendix E: Cost of Living

An important consideration to contextualize income – and economic conditions independent of income – is the associated cost of living for the region. One measure of this is the BLS Consumer Price Index (CPI) data.[104] The Bellingham MSA is not one of the local areas for which BLS produces an index.

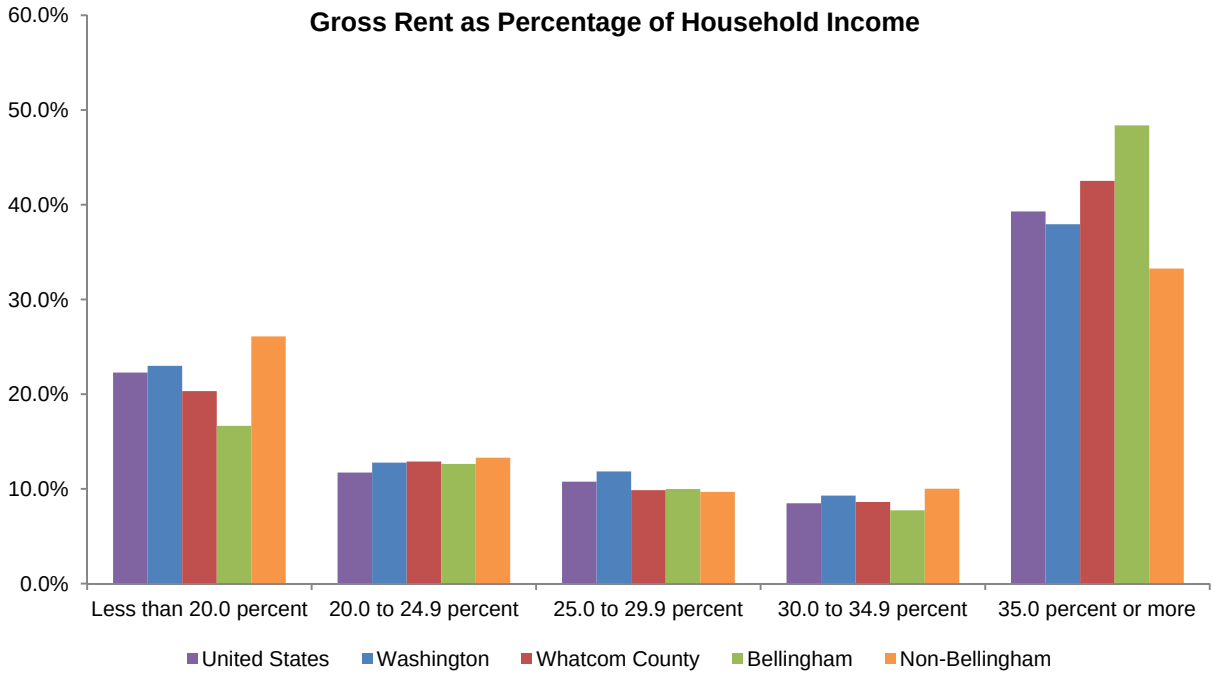
As CPI data are not available for Whatcom County or Bellingham, the project team reviewed the cost of housing to help inform discussions of the cost of living. Over half (51.1 percent) of Whatcom County households who rented their residence and 45.0 percent of those who owned their residence spent 30.0 percent or more of their income on housing – compared with 47.2 percent of renters and 41.0 percent of homeowners in Washington.[105]

As shown in the following graphs, all jurisdictions had a significant portion of renters and home owners who paid 35 percent or more of household income for their residence. Bellingham had the highest percentage of households among renters and home owners who paid over 35 percent of household income toward their residence; 48.4 percent of all Bellingham renters and 35.3 percent of Bellingham home owners. A portion of Bellingham's high rent as a share of household income may have been attributable to the student population, many of whom may have rented apartments or homes.

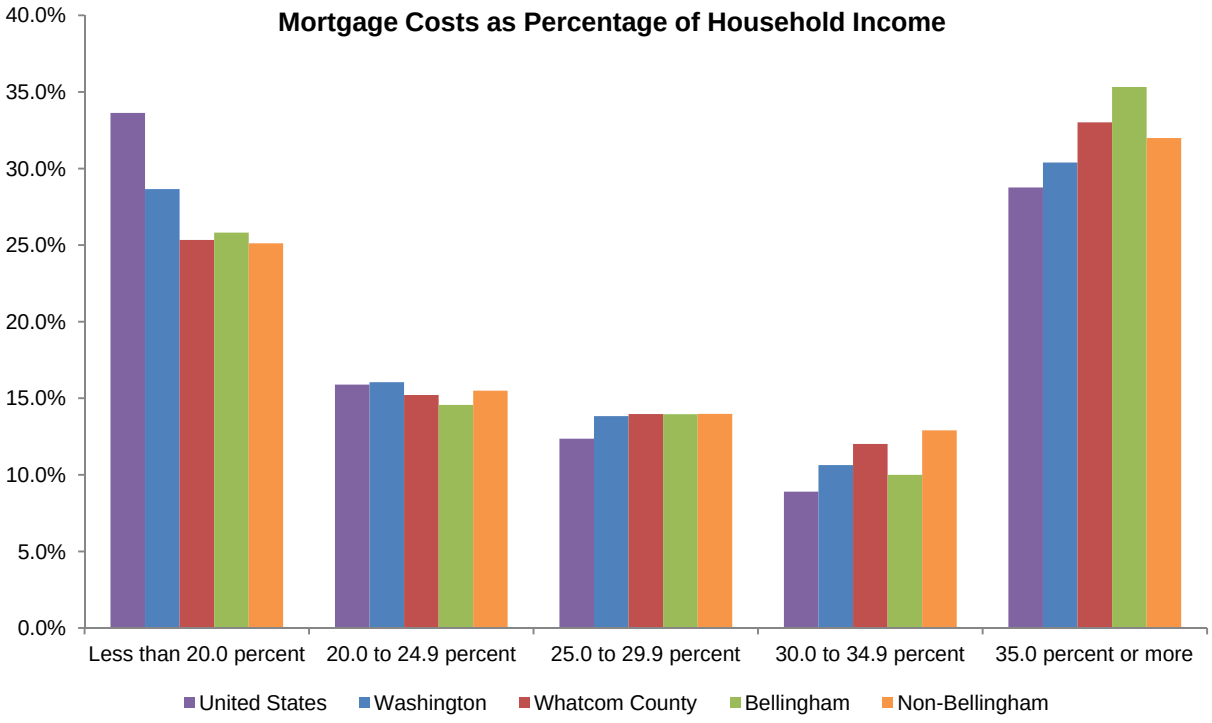
The remainder of the County tended to be more similar to the State than to Bellingham. However, rental and housing prices as a whole appeared to consume a greater percentage of total household income in Whatcom County and Bellingham as compared to the rest of the state. This could have been due to the jurisdictions' lower wages, higher housing prices, or a combination of both.

104 The BLS publishes various CPI measures of 'market basket' price changes as indicators of cost-of living. BLS cites the Chained CPI-U as its most accurate measure for cost-of-living. This index is produced on a national basis, and is available dating back to 1999. To provide insight into more localized changes, BLS also produces indexes for local areas covering all urban wage earners. While available for a longer duration and regionally focused, the BLS advises that such area series are less reliable due to sample size volatility.

105 OFM analyzes the cost-of-living by measuring housing costs (rent or mortgage) as a percent of household income. OFM considers households to be in distress when gross rent or mortgage costs are 30 percent or more of household income. OFM data use 2000 Census data as the base year and is current through 2009 ACS 1-year estimate data. In the data discussed, the project team used the 2010 ACS 3-year estimates. The project team examined mortgage costs as a percentage of household income for owner-occupied housing units in order to review housing costs as a percentage of household income without large potential for interference from the student population.



Source: US Census Bureau 2010 ACS 3-year Estimates.



Source: US Census Bureau 2010 ACS 3-year Estimates.

Washington State University's Washington Center for Real Estate Research (WCRER) publishes a myriad of housing-related data, including an affordability index and data on median sales prices. WCRER compiles an affordability index for home purchases that measures the ability of a typical family to make payments on a median price home. For example, if a jurisdiction had an affordability index of 110, it would mean that a family earning the median

income would have 10.0 percent more income than the bare minimum required to qualify to purchase a median-priced home with a 20.0 percent down payment and a 30-year mortgage.

Traditionally, Whatcom County's affordability index was slightly above the State's index until early 2004. Since that point, the County's index has generally remained below the State's index, meaning home purchases are slightly more affordable in the State as compared to Whatcom County. It is possible that Whatcom County's lower wages as compared to the State average (discussed above) contributed to this affordability lag, though the wage trend existed for a significant period prior to 2004.

The second chart below reviews the median home price for the State and County on a quarterly basis from 2004-2010.[106] Whatcom County's median home price was below the State's median home price until the middle of 2004. At this point, the County's median home price was nearly equal to the State's for the next 18 months; even briefly spiking above the State average. From early 2006 through early 2010, the County's median home price was lower than or nearly equaled that of the State.

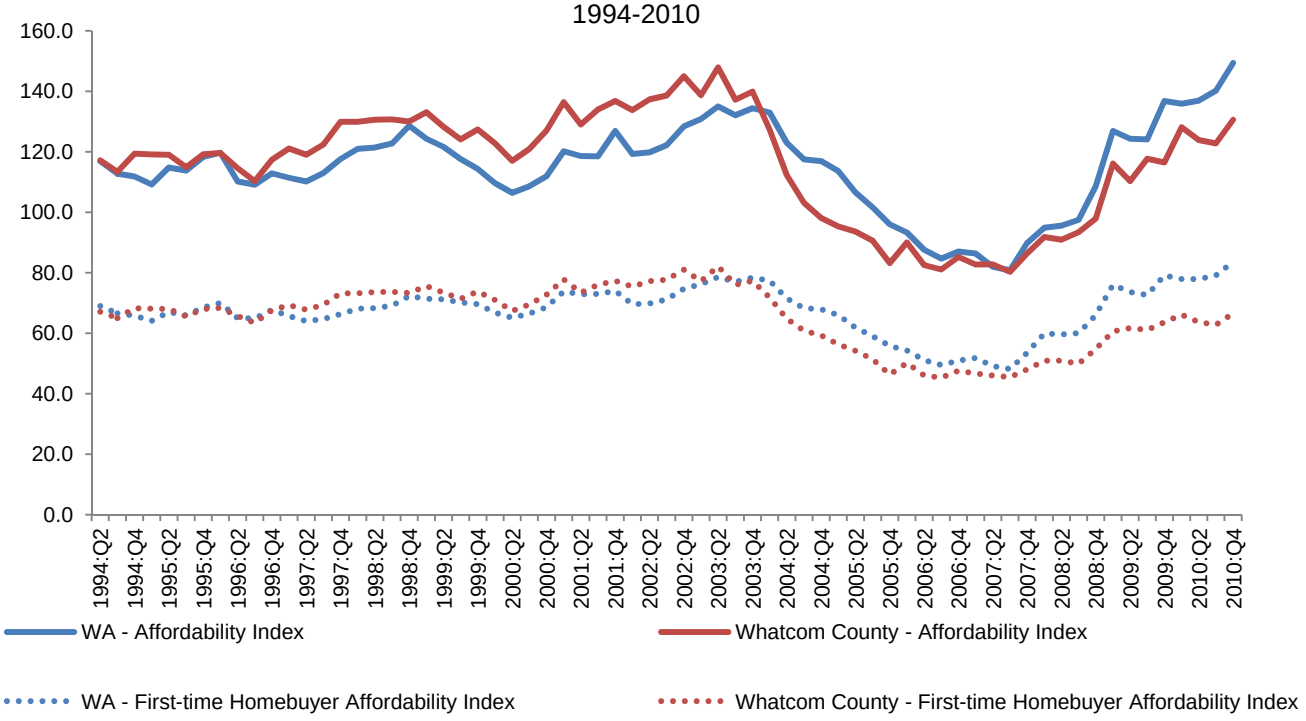
Since mid-2010, the County's median home price has been greater than the State's median home price. A portion of the County's increase could be due to the types of individuals migrating to the County from outside areas. These individuals (discussed in a previous section) have higher AGIs and may have helped sustain the housing prices by creating demand in the market whereas similar demand was not present in other markets. To the extent this supply/demand effect occurred, it increases the likelihood that people chose to move to Whatcom County and Bellingham because of the quality of life, quality of place, and/or amenities, as they were willing to pay more for a home in Whatcom County or Bellingham than other locations.

Considering both the affordability index data and median home price data, there may be two variables combining to create a lower affordability and higher median home price as compared with the State; this experience may even be potentially greater in Bellingham. The County and City's consistently lower wages coupled with the home prices that didn't fall as far from their peak as the State likely each play a role in the more expensive real estate (on an affordability measure and a median price measure) than the State average.

Given these facts, it could be argued that Whatcom County and Bellingham could be expected to have seen a small decrease in population as individuals and families seek more commensurate wages and home prices. However, this did not occur. In fact, the opposite occurred which again could suggest some level of desirability and choice associated with wanting to reside in Bellingham and or Whatcom County – even if it was less affordable.

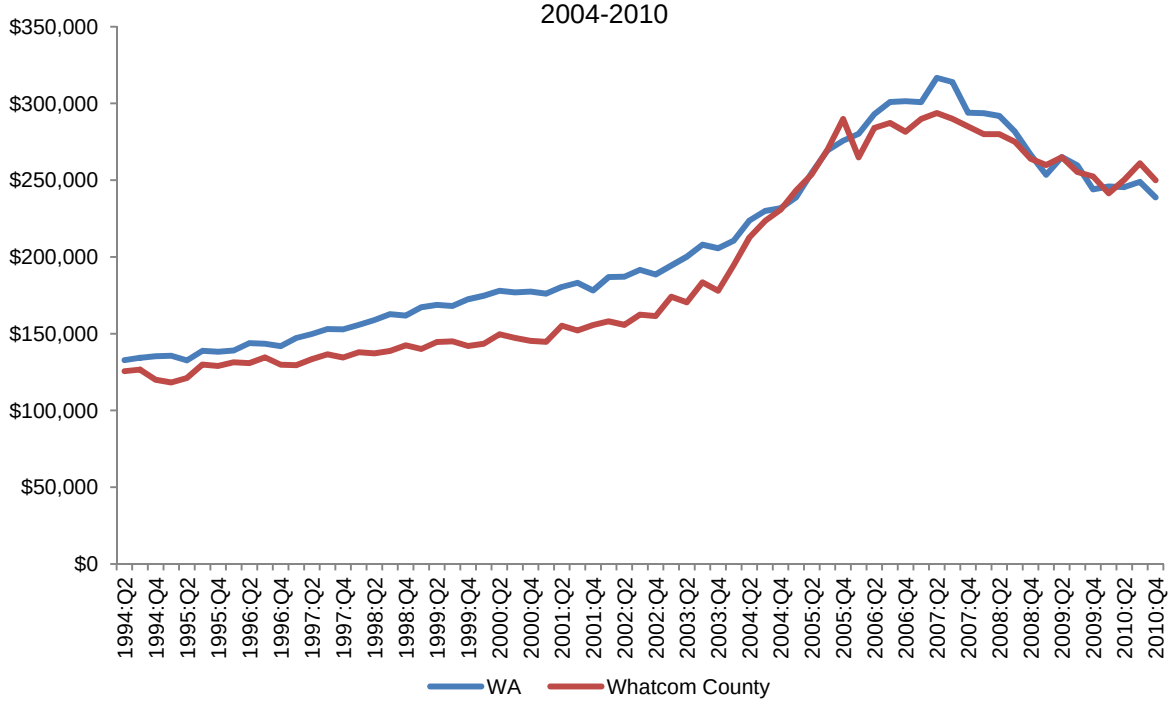
106 The Federal Housing Finance Agency (FHFA) House Price Index for the same period also reports similar data.

Washington State Affordability Index and First-time Homebuyer Affordability Index
1994-2010



Source: Washington Center for Real Estate Research

Median Home Price
2004-2010

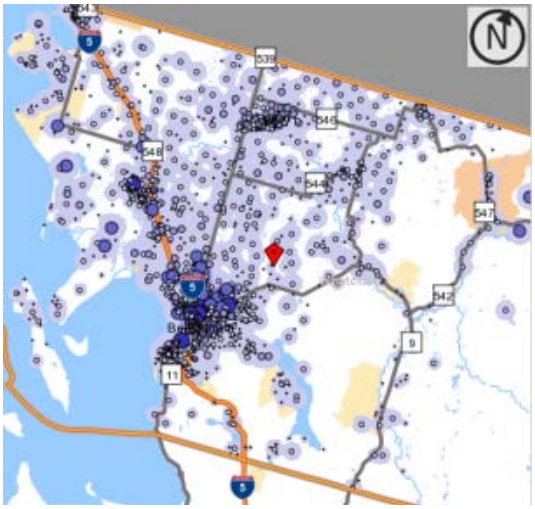


Source: Washington Center for Real Estate Research

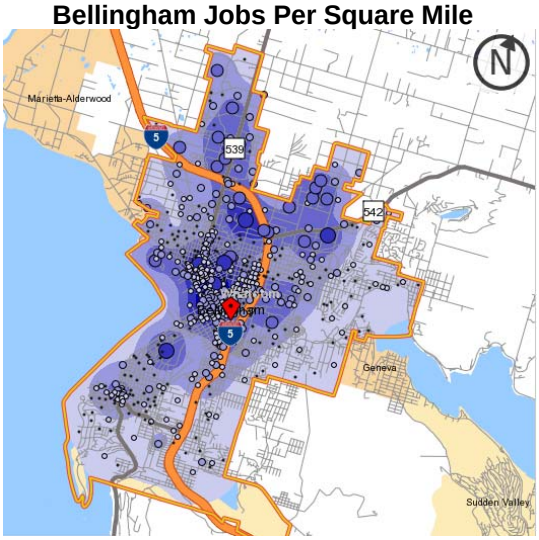
Appendix F: Bellingham's Importance as a Regional Economic Center

Approximately 60 percent of jobs in Whatcom County are located in Bellingham.[107] Countywide, jobs are concentrated in Bellingham and, within Bellingham, are concentrated west of Interstate 5 (I-5) and clustered near the Central Business District and within short distance to the waterfront.

Whatcom County Jobs Per Square Mile



Bellingham Jobs Per Square Mile



Source: US Census Bureau Local Employment Dynamics (LED), 2009.

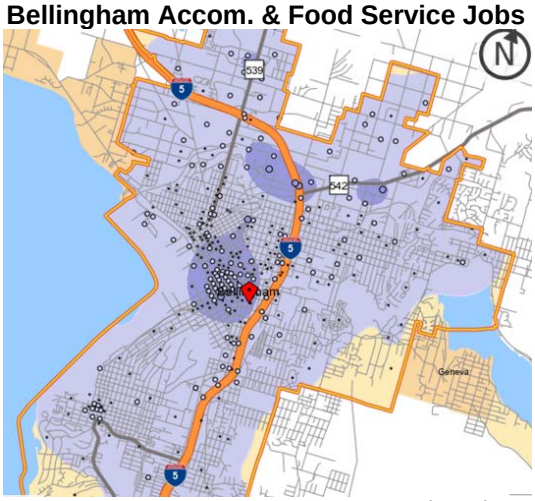
According to the US Census Bureau's 2007 Economic Census, the City also accounted for 76.1 percent of all retail sales in Whatcom County. In addition, Bellingham's retail sales per capita ($25,169) was nearly double the sales per capita of the County ($13,254). The City's accommodation and food services sales accounted for $226.6 million (55.6 percent) of the County's total accommodation and food services sales of $407.8 million.[108] The US Census Bureau's Local Employment Dynamics (LED) 2009 Work Area Comparison Report for Whatcom County indicates that the retail trade sector, as seen in other data earlier in this report, is one of, if not the largest industry sector in the County.

Specifically, as seen in the below maps, it appears that a significant portion of the City's retail, accommodation, and food services jobs are located in and around the waterfront area.

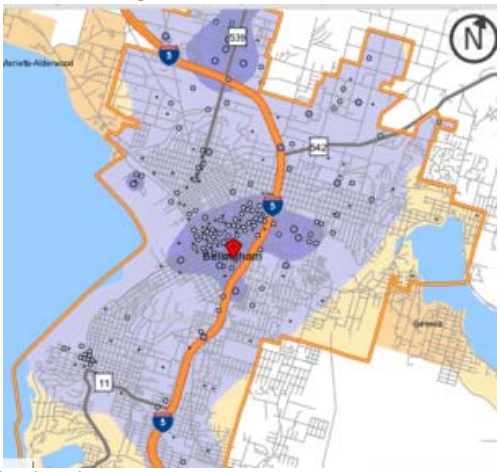
107 US Census Bureau Local Employment Dynamics (LED) 2002-2009 data.

108 US Census Bureau 2007 Economic Census.

Bellingham Accom. & Food Service Jobs



Bellingham Retail Trade Jobs



Source: US Census Bureau Local Employment Dynamics (LED), 2009.

Property Values

Just as Bellingham is the commercial center for Whatcom County, it also has a significant portion of the County's property value. As of 2010, Bellingham accounted for 35.8 percent of the County's total assessed value of real property. Bellingham achieved these results despite representing only 1.3 percent of the County's total square miles – further highlighting the importance of property value (for residential and commercial parcels) in the City for the rest of the County.[109]

In 2010, Bellingham accounted for 56.0 percent of the total residential sales volume in the County (in dollar amount) and 52.1 percent of total residential transactions in the County; suggesting the City's average house price is greater than the County's average price – a trend that has existed since the data set used began in 2006. Similarly, while Bellingham and the remainder of Whatcom County have both seen significant declines in residential sales volume (in dollars) since 2006, the City's decline is marginally slower than the decline experienced by the remainder of the County (-44.8 percent versus -47.1 percent).

Between 2005 and 2010, Bellingham's median and average home prices have been higher than the median and average prices for the County as a whole. It is important to note that the data for Whatcom County include the Bellingham data and are not presented in a disaggregated form. As a result, Bellingham's median and average home values are likely even greater than the non-Bellingham portion of the County.

During the peak of the housing bubble (2006-2008), Bellingham's home prices were not as far above the County's home prices as after the burst of the bubble (2009-2010), when the City's home prices appear to have increased the value difference with the County's home prices. This suggests that the Bellingham housing market did not decrease in value to the same extent as the remainder of the County (keeping in mind that County data are not disaggregated and include Bellingham's prices).

109 US Census Bureau, 2010 data.

Median and Average Prices of Houses Sold, 2005-2010

Median Sales Price	Bellingham	Whatcom County	Difference ($)	Difference (%)
2010 Median Sales Price	$264,950	$255,000	$9,950	3.9%
2009 Median Sales Price	$274,000	$259,990	$14,010	5.4%
2008 Median Sales Price	$285,000	$278,533	$6,467	2.3%
2007 Median Sales Price	$300,000	$290,725	$9,275	3.2%
2006 Median Sales Price	$295,000	$283,000	$12,000	4.2%
2005 Median Sales Price	$269,000	$259,900	$9,100	3.5%
Average Sales Price	**Bellingham**	**Whatcom County**	**Difference ($)**	**Difference (%)**
2010 Average Sales Price	$313,813	$291,985	$21,828	7.5%
2009 Average Sales Price	$320,767	$301,124	$19,643	6.5%
2008 Average Sales Price	$333,731	$323,172	$10,559	3.3%
2007 Average Sales Price	$351,063	$340,448	$10,615	3.1%
2006 Average Sales Price	$341,105	$324,852	$16,253	5.0%
2005 Average Sales Price	$302,749	$288,277	$14,472	5.0%

Most recently, the 2011 report reviews the differences in median sales price for new and existing homes in Whatcom County and Bellingham. In both 2009 and 2010, the City's median sales prices for new and existing homes were greater than the County's median sales prices for new and existing homes. New homes in Bellingham had a particularly higher median sales price than did new homes in Whatcom County (2009: $336,650 vs. $262,500; 2010: $313,500 vs. $256,750).

According to the report, in 2010, houses in Bellingham's Census tracts had a higher average sales price for new homes than new homes sold in the rest of Whatcom County. In the nine Census tracts in Bellingham with new home sales in 2010, eight had an average sales price of over $300,000. Of the ten Census tracts in the remainder of the County with new homes sales in 2010, only one Census tract had an average sales price over $300,000.[110]

Among single family sales by Census tract in 2010, the properties in the Fairhaven, South Hill, and Edgemoor sections of the City had significantly higher sales prices than the rest of the City. The average sales price in the Fairhaven/South Hill section was $574,167 and the average sales price in Edgemoor was $555,433. Sales volumes were the highest in the Mount Baker, Alabama Hill/Silver Beach, North and South Short/Lake Whatcom, and Puget/Whatcom Falls/Samish areas of the City.

110 Similar data for condominium sales are also included in the report. Bellingham accounted for 63.0 percent of condominium sales in Whatcom County during 2010 and had a higher average sales price than the remainder of the County.

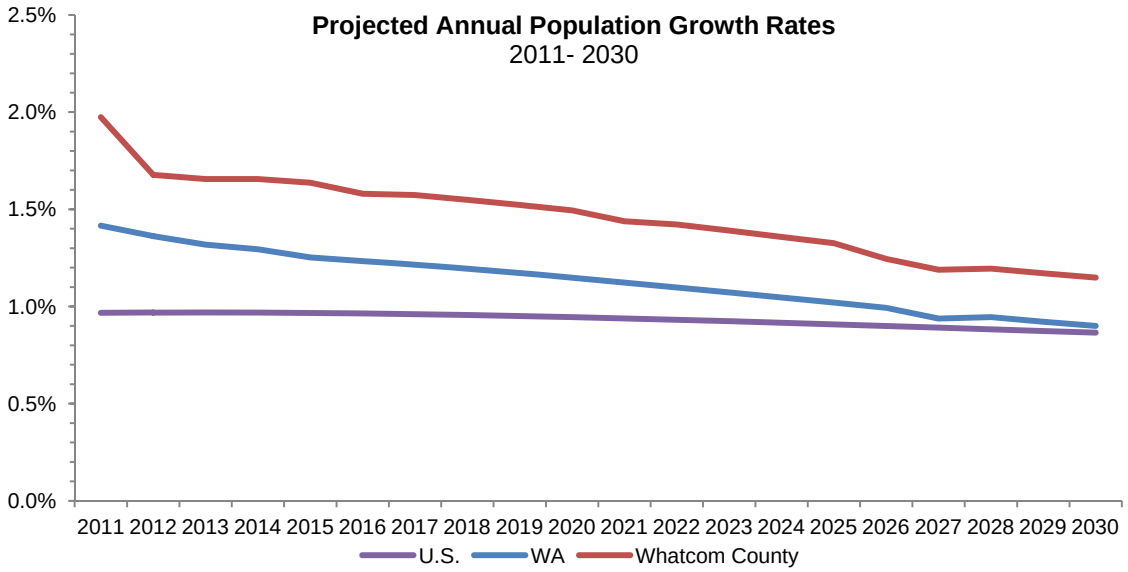
Appendix G: Projections for the Future – Population and Job Growth

Population Growth

WA OFM produces projections for future population growth on the State and County levels.[111] OFM projects the State's population growth rate from 2010 to 2030 to be 1.1 percent, just above the US rate of 0.9 percent. OFM projects Whatcom County's 2010-2030 population growth rate to be 1.5 percent.

Population growth forecasts for the City of Bellingham are not included in the OFM data. Bellingham's population growth rate is assumed to be similar, though not identical, in real experience to the County's population growth rate. It should be noted that Bellingham's CAGR for the most-recent 10 years (1.9 percent) is the same as Whatcom County's most-recent 10-year CAGR, for this reason, the project team used the same out-year CAGR for Bellingham as projected in OFM's estimates for Whatcom County.

For purposes of calculations later in this report, the project team used OFM's compound annual growth rate projections for Whatcom County for Bellingham; 1.6 percent through 2019 and 1.5 percent through 2030. This is in line with OFM's projections for a decreased rate of population growth for Whatcom County and the State in future years.



Source: WA OFM

OFM estimated that Whatcom County accounted for 2.9 percent of the State's total population.[112] By 2030, OFM projects the Whatcom County population to reach approximately 261,000 individuals and represent 3.1 percent of the State's population. Whatcom County's proportional increase in State population share occurs due to OFM's long-term forecasted population growth rate for Whatcom County being greater than the State's long-term forecasted population growth rate; this can be seen in the graph above.

111 OFM produces a *Forecast of State Population* (released in November 2011) that solely forecasts the population of Washington through 2040. OFM, as part of the Growth Management Act (GMA), produces population estimates every five years. New estimates are to be released in March of 2012 and were not available for use in this report. This report uses OFM 2007 Growth Management Projections through 2030. Historical differences between OFM projections and actual occurrences have been small. OFM's 2007 projections for 2010 were 97.3 percent of 2010 Census data. Similar or smaller margins were also seen in prior data.

112 OFM's estimates were made prior to the release of data from the 2010 Census. The 2010 Census suggested Whatcom County comprised 3.0 percent of the State's total population; up from 2.8 percent in 2000.

On a State level, it is worth noting that OFM's November 2011 *Forecast of State Population* (statewide projections) projects significant growth in the age 65 and over population from 2010 levels (24.2 percent) by 2040. Specifically, between 2010 and 2040, those age 65 and over account for 49.7 percent of OFM's projected total net population growth in the State. OFM's projections are consistent with growth in the population from the 2000 census to the 2010 census. OFM's projections likely account for baby boomers continuing to age and live longer, thus driving the increase in the population age 65 and over.

Job Growth

Washington's ESD produces Occupational Employment Projections for the State and its sub-regions that forecast the 2019 estimated levels of employment for over 800 occupation types.[113] Statewide, ESD projects an average annual growth rate of 1.4 percent for all occupations through 2019 resulting in an increase in employment of approximately 495,000 from 2009 levels. Over two-thirds of the State's projected increase is attributable to projected gains in nine occupational categories:

- Office and Administrative Support
- Sales Related
- Computer and Mathematical
- Computer Specialists
- Food Preparation and Serving Related
- Transportation and Material Moving
- Healthcare Practitioners/Technical Related
- Personal Care and Service
- Building and Grounds Cleaning and Maintenance.

ESD projects the Northwest Washington region[114] (includes Whatcom County) to grow at a slightly greater average annual growth rate than the State estimate through 2014 (1.5 percent versus 1.4 percent). Thereafter, through 2019, it projects the region will grow at annual average rate of 1.6 percent and the State will remain at the same average annual growth rate of 1.4 percent. In total, ESD projects the Northwest region's 2019 employment level will be 16.6 percent greater than its 2009 employment level; higher than the Statewide projected 15.3 percent increase during the same time period. By 2019, Northwest Washington is projected to have estimated employment of 207,449; an increase of nearly 30,000 over 2009 levels. Similarly to the State, over two-thirds of the region's projected increase is attributable to projected gains in nine types of occupations:

- Office and Administrative Support (3,900 new jobs; accounts for over 13.2 percent of total increase)
- Sales Related (2,400 new jobs)
- Production (2,300 new jobs)
- Transportation and Material Moving (2,100 new jobs)
- Food Preparation and Serving Related (2,000 new jobs)
- Personal Care and Service (1,900 new jobs)
- Education, Training, and Library (1,900 new jobs)
- Building and Grounds Cleaning and Maintenance (1,800 new jobs)
- Construction and Extraction (1,700 new jobs).[115]

113 The project team reviewed ESD's May 2011 (most recently available) projections.

114 ESD indicates that Northwest Washington region is comprised of Island County, San Juan County, Skagit County, and Whatcom County.

115 ESD differentiates between Construction and Extraction occupations and Construction Trades Workers.

Baseline Growth for Whatcom County and Bellingham

Without the planned development of GPT, the State has already projected significant population and job growth for Whatcom County that build upon the County's historical growth trend. These projections are outlined above. Based on the state's projections, it is possible to state a baseline scenario for county population and job growth over a ten-year period.

Population Growth

The project team used OFM's projected annual growth rates from 2011 through 2030 to project the growth of the 2010 Census population data for Whatcom County and Bellingham.[116] By 2021, Whatcom County's projected population is approximately 240,000 and Bellingham's projected population is approximately 96,000. Through 2021, the OFM's projected average annual growth rate is approximately 1.6 percent, and 1.5 percent through 2030. Whatcom County's 2030 population is projected to be 269,000 and Bellingham's 2030 population is projected to be 108,000.

Projected Population Growth

	2010 Census Population	Average Annual Growth Rate Through 2021	Average Annual Growth Rate Though 2030	Proj. 2021 Population	Proj. 2030 Population
Whatcom County	201,140	1.6%	1.5%	240,000	269,000
Bellingham	80,885	1.6%	1.5%	96,000	108,000

Job Growth

In 2009, Washington's ESD projected that the northwest region of Washington (including Whatcom County) will see an average annual job growth of 1.5 percent from 2009-2014 and a 1.6 percent annual average job growth from 2014-2019.[117] At the projected rates, Whatcom County would have 88,389 jobs by 2021, an addition of almost 15,000 jobs from 2010. Similarly, Bellingham would have 53,034 jobs by 2021, an increase of almost 9,000 jobs from 2010.

116 The project team used Bellingham's 2010 population as a percentage of total Whatcom County population throughout the estimates. This ratio is used purely for the purposes of estimations; actual results will vary and are subject to tangible and intangible occurrences that cannot be incorporated in projections.

117 The project team used these annual average growth rates and applied them to the BLS OES data for 2010 jobs in Whatcom County. To calculate the number of Bellingham jobs, the project team used took 60 percent of all jobs in the County (per LED data suggesting an average of 60 percent of all jobs in the County exist in Bellingham). The calculation did not include the estimated job growth for 2009 as the OES figure is from 2010. However, the project team did apply the 2010 growth rate to this figure so as to ensure it captured the possible net increase and not artificially lower job growth. For 2020-2022, the project team used the projected 1.6 percent average annual growth rate to estimate the number of jobs.

Projected Job Growth[118]

	Growth Multiplier	Whatcom County Jobs	Net Increase	Growth Multiplier	Bellingham Jobs	Net Increase
May-10	-	73,420	-	-	44,052	
2010	1.015	74,521	1,101	1.015	44,713	661
2011	1.015	75,639	1,118	1.015	45,383	671
2012	1.015	76,774	1,135	1.015	46,064	681
2013	1.015	77,925	1,152	1.015	46,755	691
2014	1.015	79,094	1,169	1.015	47,457	701
2015	1.016	80,360	1,266	1.016	48,216	759
2016	1.016	81,645	1,286	1.016	48,987	771
2017	1.016	82,952	1,306	1.016	49,771	784
2018	1.016	84,279	1,327	1.016	50,567	796
2019	1.016	85,627	1,348	1.016	51,376	809
2020	1.016	86,998	1,370	1.016	52,199	822
2021	1.016	88,389	1,392	1.016	53,034	835
Total		**88,389**	**14,969**		**53,034**	**8,982**

118 The project team also assessed US Census Bureau LED data from 2009 for Bellingham and Whatcom County. The 2009 LED data indicated 69,610 jobs in the County and 41,613 jobs in the City. Applying an annual average growth rate of 1.015 percent for 2009-2014 and an annual average growth rate of 1.016 percent for 2015-2021, yielded a total job growth in the County of 14,193 and 8,484 in Bellingham. Ultimately, the project team used the OES data as it is more recent and showed a higher number of actual jobs than projection based upon the 2009 data. The OES data were used so as to not artificially discount 'trajectory' growth when comparing to projected growth from GPT.